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# Consumer Receptivity of Foreign Products: The Roles of Country-of-Origin Image, Consumer Ethnocentrism and Animosity

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**CONSUMER RECEPTIVITY OF FOREIGN PRODUCTS:  
THE ROLES OF COUNTRY-OF-ORIGIN IMAGE,  
CONSUMER ETHNOCENTRISM AND ANIMOSITY**

by

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Old Dominion University in Partial Fulfillment of the  
Requirement for the Degree of

**DOCTOR OF PHILOSOPHY**

**BUSINESS ADMINISTRATION**

**OLD DOMINION UNIVERSITY**

August 2009

Approved by:

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John B. Ford (Director)

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Edward Markowski (Member)

## **ABSTRACT**

### **CONSUMER RECEPTIVITY OF FOREIGN PRODUCTS: THE ROLES OF COUNTRY-OF-ORIGIN, CONSUMER ETHNOCENTRISM AND ANIMOSITY**

Larry Lee Carter, Jr.  
Old Dominion University, 2009  
Director: Dr. John B. Ford, IV

In business, the survival of a manufacturing firm is dependent upon the consumer's acceptance and purchase of its products. Globalization and the accessibility of markets worldwide have expanded the potential customer base from purely domestic to include international customers. It is imperative for marketing managers to accurately assess consumer product perceptions to forecast foreign market entry acceptance and develop some form of competitive advantage that will be sustainable over the long run. Despite the apparent relevance and importance of analyzing consumer product perceptions, there is a lack of research in modeling the relationships between primary antecedents that influence consumers' receptivity toward foreign products.

The purpose of this dissertation is three-fold. The first objective is to carry out a thorough review of the extant literature by identifying, prioritizing and categorizing main determinants of consumer perceptions of and willingness to buy foreign products. The second goal is to develop and test a main effects model of these determinants. This objective will serve as a replication of past research to provide additional validation of their findings and as an aggregate effort to test these constructs within a complex model. The third objective is to contribute to the understanding of moderated relationships among these determinants by investigating potential interactions that influence consumer

perceptions and willingness to buy foreign products. Five main effects and ten interaction effects hypotheses are tested through the use of SEM measurement, path and multiple group analyses. A structural model of effects was developed to explain the consumer's receptivity of foreign products and tested for goodness-of-fit. Upon its validation, the direct and moderated effects proposed by the study were tested within the model.

This dissertation contributes to the marketing discipline by examining the nature of the relationships between key determinants affecting foreign product purchase and establishes order effects among these variables. It offers alternative perspectives toward the unique influences of three country-related variables, namely country-of-origin image, consumer ethnocentrism and international animosity. Instead of researching a single country of origin, this study expands the generalizability of its results by providing U.S. consumers' perceptions toward products from three Asian countries that currently differ with regards to their levels of economic development.

This dissertation is dedicated to my loving wife, Anna.

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## **CHAPTER 1: STATEMENT OF THE PROBLEM**

### **INTRODUCTION**

In business, the survival of a manufacturing firm is dependent upon the consumer's acceptance and purchase of its products. Globalization and the accessibility of markets worldwide have expanded the potential customer base from purely domestic to both domestic and international customers. Since the decline of communism during the 1990's, many countries have embraced the ideology of globalization and free international trade, thus reducing tariffs and other trade barriers to facilitate the importation of foreign goods. Within this global marketplace, businesses are faced with ever-increasing competition that is aggressively vying for customer attention with substitutable goods in virtually every product category (Netemeyer, Durvasula and Lichtenstein 1991). Customers from many countries can choose to purchase their goods from both domestic and foreign manufacturers due to these reductions in trade barriers among nations. This phenomenon has several implications for sales and marketing managers looking for opportunities to expand overseas. In most developed countries, firms have to look beyond their geographic borders for new markets as their domestic marketplace becomes saturated with competitive and substitutive products. For example, emerging national economies, such as India, have recently produced a growing middle class of consumers with more discretionary income for personal consumption, thus attracting companies currently competing in saturated markets (Bandyopadhyay and Banerjee 2002).

Globalization and the emergence of global markets are the result of several changes in governmental policy, technology and society that have restructured the global business landscape over the last few decades. The creation of the World Trade Organization (WTO) in 1995 brought about a phenomenal increase in the participation of international trade among its country members over the past decade. The proliferation of free trade areas, such as the North American Free Trade Agreement (NAFTA), the European Union (EU), and the Association of Southeast Asian Nations (ASEAN), has led to the dramatic reduction of trade barriers to encourage more trade among the member nations and relax trading protocols across their borders.

Technological advances in communication and information diffusion have increased the exposure of products and brands to consumers across the globe. The worldwide acceptance and use of the Internet has facilitated this dissemination of information to both foreign and domestic consumers and allows them accessibility to more products and services via online shopping (Pharr 2005). Technologies in transportation (e.g., more international travel routes and destinations combined with safer, faster modes of transportation) have also given consumers quicker access to foreign lands where they come in direct contact with foreign products and advertising. These exposures have influenced consumer expectations and choice for products along various attribute dimensions. Shipping capabilities and efficiencies have also benefited from various modes of transportation and add to the convenience of acquiring foreign products in a timely manner.



## **PURPOSE OF THIS RESEARCH**

It is imperative for marketing managers to accurately assess consumer product perceptions to forecast market entry acceptance. Once the firm has gained access to the foreign market, they must quickly develop some type of competitive advantage that will be sustainable over the long run. Despite the apparent relevance and importance of analyzing consumer product perceptions, there is a lack of research in modeling these perceptions toward foreign products. The purpose of this study is three-fold. The first objective is to carry out a thorough review of the extant literature by identifying, prioritizing and categorizing main determinants of consumer perceptions of foreign products. The second goal is to develop and test a main effects model of these determinants upon each stage of consumer buying. The buying process is comprised of four stages, namely consumer evaluation, attitude, purchase intention, and actual purchase of the foreign product. This objective will serve as both a replication and aggregation of past research to provide additional validation of their findings. The third objective of this study is to contribute to the understanding of the relationships among these determinants by investigating potential interactions that influence consumer perceptions and willingness to buy foreign products. Limitations of this study are also identified and future research directions are suggested to advance this field of study.

## **CONSUMER PURCHASE BEHAVIOR**

### **Hierarchy of Effects Model**

One of the most recognizable models within consumer behavior is the standard learning hierarchy of effects (Mowen 1995). It theorizes that beliefs influence affect,

which subsequently leads to actual behavior. Beliefs are formed directly through consumer information processing and cognitive learning. For example, a product evaluation is an overall judgment about the product that is developed from the reception, encoding and storage of product information and attributes within a consumer's memory. It is generated from several quality-related dimensions of the product, including its reliability, exclusivity, workmanship and degree of technological advancement (Lim, Darley and Summers 1994). Affect refers to the amount of feeling for or against a stimulus and is commonly manifested in an individual's attitude towards the stimulus, such as a consumer's attitude towards a product or brand (Maheswaran and Sternthal 1990). This attitude is typically comprised of the consumer's feelings toward several product dimensions, including its superiority over competing products, its perceived value and its degree of likeability by the consumer. Behavior is an action performed by the individual, such as purchasing or declining to purchase a product or service (Klein, Ettenson and Morris 1998).

### **Attitude and Behavior Models**

The relationship between product beliefs, attitudes and behavior can be further explained by examining various consumer behavior models of attitude formation and behavioral intention. With regards to attitude formation, the multi-attribute attitude model (Fishbein and Ajzen 1975) states that an individual's overall attitude towards an object is determined by the number and strength of the beliefs associated with that object. Changes in the person's overall attitude are a result of manipulating the importance of these beliefs, adding new beliefs or changing the evaluation of existing beliefs. Lutz (1981) investigated the outcomes of beliefs and attitudes and proposed the unidimensional

attitude theory, which states that beliefs influences attitude formation, which leads to behavioral intentions and subsequent behavioral action. From a consumer behavior perspective, behavioral intentions reflect the consumer's inclination to engage in a specific behavior, such as purchasing a product (Baker and Churchill 1977; Perrien, Dussart and Paul 1985; Kilbourne 1986; Okechuku and Wang 1988). While Hui and Zhou (2002) identify purchase intention as a behavioral tendency to buy specific products during previous shopping engagements, other researchers measure purchase intention as the consumer's willingness to buy the product in the future (Dodds, Monroe and Grewal 1991; Ulgado and Lee 1996).

Based on the afore-mentioned theoretical models pertaining to the relationships between beliefs, attitudes, behavioral intention and behavior, four distinct stages describe the typical consumer purchasing behavior. The first stage, product evaluation, refers to the consumer's overall cognitive evaluation of the product. The consumer's attitude towards the product serves as the second stage and pertains to her overall affective evaluation or feelings toward the product. The third stage, purchase intention (also referred to as 'willingness to buy' or 'reluctance to buy'), is the consumer's subjective judgments about their likelihood to make future purchases. Finally, product purchase refers to the actual purchase behavior of the consumer.

## **CONTRIBUTION**

The aim of this dissertation is to provide a succinct review and analysis of consumer perceptions and willingness to buy foreign products, establish the nature of the relationships of key determinants affecting foreign product purchase and develop order

effects between these variables. It offers an alternative perspective on the effects of three country-related variables, specifically country-of-origin image, consumer ethnocentrism and consumer animosity, upon each stage of the consumer's evaluation of and decision to purchase a foreign product. The dissertation attempts to clarify the nature of the relationship between consumer ethnocentrism and consumer animosity towards a foreign country. It also extends the research by providing an analysis of U.S. consumer perceptions and intentions across products from a variety of countries rather than the typical single country of analysis.

## **ORGANIZATION OF THIS DISSERTATION**

The objective of Chapter 1 is to introduce the constructs of interest and provide the justification for and establish the relevance of this area of research in today's global market. Chapter 2 is comprised of an extensive review of the literature to identify key components affecting consumers' perceptions, attitudes and intent to purchase products from foreign countries. Based on these literature findings, the conceptual framework is presented and a series of hypotheses are offered in this dissertation. Chapter 3 describes the methodology proposed to test the hypotheses in terms of measures, sample selection and statistical methods. Chapter 4 consists of the statistical analyses and interpretation of the data results. Following the results, the dissertation concludes with a discussion of the findings and their managerial implications in Chapter 5. The limitations of the study and suggestions for future research are also covered within this chapter.

## **CHAPTER 2: REVIEW OF THE LITERATURE**

### **INTRODUCTION**

The following literature review is a critical examination of previous studies that focused on consumer perceptions and choice of foreign products. It was conducted with two primary objectives in mind. The first goal was to identify key antecedents affecting the consumer's evaluation of, attitude towards, likelihood to buy and actual purchase of products from another country. The second objective was to assess the relationships found between these antecedents and the outcome variables to uncover discrepancies and gaps within this research stream that need additional investigation.

### **ARTICLES SELECTION**

An extensive search of key terminology relating to foreign product evaluation and purchase was initially conducted using standard computerized databases (e.g., ABI Inform, InfoTrac and PsycInfo). After identifying and screening relevant articles from these databases, additional research studies were selected from within the reference sections of the articles initially retrieved. The intention of this literature search is to provide a broad framework of the major determinants influencing a person's decision to buy a foreign product as opposed to including all singular-focused issues surrounding these main determinants. With this objective in mind, only articles addressing potential determinants that affect any of the four stages of consumer perception and purchase of foreign products (i.e., evaluation, attitude formation, willingness to buy and actual

purchase) were selected for further analysis. In total, 99 articles met this criterion and were included in this literature review (see Appendix A for summaries of these articles).

Of these 99 published studies relating to consumer perceptions and purchase of foreign goods, 97 were empirical and two studies were conceptual. The earliest article was published in 1967; however 84 articles were published after 1989 and 30 of these were published since 2000. These statistics clearly indicate that the relevance of this research stream is viable and growing with the increase in business globalization. As illustrated in Table 1, the overwhelming majority of the articles included were from marketing journals, such as *Journal of Marketing*, *Journal of Consumer Behavior*, *International Marketing Review*, *Journal of the Academy of Marketing Science*, *Journal of Advertising*, and *Journal of International Consumer Marketing*. General business journals were also evaluated as potential sources, including *Journal of Business Research*, *Journal of International Business Studies*, and *Multinational Business Review*. Finally, journals from cross-disciplinary fields, such as *Agribusiness*, also contributed to this research topic.

**TABLE 1**

**Tally of Journal Articles in the Review**

**Journals (number of articles reviewed)**

1. <i>International Marketing Review</i> (15)	17. <i>Multinational Business Review</i> (2)
2. <i>Journal of International Consumer Marketing</i> (12)	18. <i>Agribusiness</i> (1)
3. <i>Journal of International Business Studies</i> (8)	19. <i>Journal of Advertising</i> (1)
4. <i>Journal of the Academy of Marketing Science</i> (8)	20. <i>Journal of Advertising Research</i> (1)
5. <i>European Journal of Marketing</i> (7)	21. <i>Canadian Journal of Administrative Sciences</i> (1)
6. <i>Journal of Marketing Research</i> (5)	22. <i>Consumer Research</i> (1)
7. <i>Journal of Consumer Research</i> (4)	23. <i>International Journal of Retail &amp; Distribution Management</i> (1)
8. <i>Journal of Global Marketing</i> (4)	24. <i>Journal of Consumer Behaviour</i> (1)
9. <i>Journal of International Marketing</i> (4)	25. <i>Journal of Consumer Marketing</i> (1)
10. <i>Journal of Business Research</i> (3)	26. <i>Journal of Consumer Policy</i> (1)
11. <i>Psychology &amp; Marketing</i> (3)	27. <i>Journal of Marketing Practice: Applied Marketing Science</i> (1)
12. <i>International Journal of Advertising</i> (2)	28. <i>Marketing and Research Today</i> (1)
13. <i>International Journal of Research in Marketing</i> (2)	29. <i>Marketing Intelligence &amp; Planning</i> (1)
14. <i>Journal of Euromarketing</i> (2)	30. <i>The International Executive</i> (1)
15. <i>Journal of Marketing</i> (2)	31. <i>International Journal of Retail &amp; Distribution Management</i> (1)
16. <i>Journal of Marketing Theory and Practice</i> (2)	

**CONSUMING COUNTRIES**

This study attempts to analyze consumer perceptions of foreign goods that are either imported or manufactured within the domestic country by a foreign firm. As globalization increases, it is common practice for foreign manufacturers to have various production stages established in multiple countries. The majority of the reviewed articles investigated consumer samples from only one country of analysis. Shoppers from a single metropolitan area or a convenience sample of college students were typically used as study respondents. Few studies examined multiple country samples due to the high costs

associated with multi-cultural research efforts as well as the increased complexity of interpreting the analytical results.

From the articles examined, the selection of country relationships to be analyzed was based on one or more of the following criteria. First, the studies investigated potential and current foreign trade practices between specific countries and regions. The United States and Japan are frequently evaluated as exporters within this context due to their important, persevering roles as leaders within the world economy (Chinen, Jun and Hampton 2000; Han and Terpstra 1988). On a similar note, Balabanis and Diamantopoulos (2004) investigated the United Kingdom, United States, France, Germany, Japan and Italy for their domination of products in the world market. In studies involving European consumers, Germany is often recognized within studies as a primary exporter across most European markets.

Researchers also commonly investigated consumer perceptions of foreign products from countries with varying levels of economic and industrial development. These studies are typically interested in evaluating the effects of national industrial development on consumer perceptions of all products from a particular country of interest. Papadopoulos, Heslop and Beracs (1989) investigated the importance of a country's industrial development as an influencer of the consumer's image of that country. Another study categorized countries by their level of technological advancement (Agbonifoh and Elimimian 1999) in order to make comparisons about consumer evaluations of products from those countries. Goldberg and Baumgartner (2002) identified Thailand as a developing country and investigated Thai consumers' envy of lifestyles within a developed country, specifically the United States. The authors posited



cross-country attraction as the motivation for U.S. product purchase and consumption by the younger segments of Thai consumers. Several multi-country studies compared consumer perceptions of foreign goods manufactured in industrialized and less-developed countries (Orth and Firtbasová 2003; Cordell 1992). The overall evidence indicates that consumers generally evaluate goods from industrialized countries more highly than products from less industrialized countries; however results for purchase intention of these compared goods are mixed.

Finally, some studies examined specific country matches based on their cultural orientations. For example, while countries like Bangladesh are considered extremely homogeneous markets by some researchers (Kaynak, Kucukemiroglu and Hyder 2000), one study segregated Canada into British and French subcultures to evaluate consumer perceptions towards British and French products (Laroche *et al.* 2002). Also while European countries tend to prefer European products, Austria exhibits strong cultural variations among its consumers in both worldmindedness and nationalism, which directly translates to mixed emotions towards the preference of foreign products (Rawwas and Rajendran 1996).

Studies have investigated the influence of acculturation on consumer evaluations (Laroche *et al.* 2002; Quester and Chong 2001). As for national cultural similarities, consumers with high levels of ethnocentrism have been shown to exhibit more favorable attitudes towards foreign products from countries with similar cultures and are more willing to buy these products (Watson and Wright 2000). Other researchers investigated consumers from cultures that have strong dimensions of collectivism or individualism. Chung and Pysarchik (2000) studied Korean consumers to detect the influence of group

conformity and face-saving on their attitudes toward and intentions to purchase foreign products. Gürhan-Canli and Maheswaran (2000) compared U.S. and Japanese consumers to find support that the dimension of national cultural orientation known as individualism/collectivism moderates the effects of country-of-origin image on foreign product evaluation. Another national cultural orientation dimension, power distance, was also found to be useful in explaining differences in country-of-origin evaluations among Mexican and American consumers (Insch and McBride 2004).

The following table categorizes the countries of consumers included in this review. Regional percentages for each country or area are reported and the total percentages are based on 127 foreign trade combinations that were identified in the review.

**TABLE 2****Countries of Consumers Evaluating Foreign Products**

<b>Area</b>	<b>%</b>	<b>Country (Region)</b>	<b>No.</b>	<b>Area</b>	<b>%</b>	<b>Country (Region)</b>	<b>No.</b>
North America	40.2	United States	43	Asia	16.5	China	5
		Canada	7			South Korea	5
		<i>North America</i>	1			India	4
Europe	31.5					Japan	3
						Bangladesh	1
		Netherlands	5			Singapore	1
		France	4			Thailand	1
		Great Britain	4			<i>Southeast Asia</i>	1
		Russia	4	South Pacific	4.0	Australia	
		Germany	3			New Zealand	3
		Poland	3				2
		Spain	3	Africa	3.1	Nigeria	
		Austria	2			Ghana	3
		Bulgaria	2				1
		Hungary	2	Latin America	3.1	Mexico	
		Turkey	2			Venezuela	3
		Belgium	1				1
		Czech Republic	1	Middle East	1.6	Israel	
		Greece	1			Saudi Arabia	1
		Ireland	1				1
		Italy	1				
		<i>United Kingdom</i>	1				

The information in Table 2 identifies countries that are commonly analyzed for consumer perceptions of foreign products as well as those that have not been studied within this context. It is interesting to note that the most commonly studied countries reside in the highly industrialized regions of North America and Europe, encompassing nearly 41% and 32% of the studies reviewed, respectively. The third most researched region is Asia; however it captures a mere 16.5% of the studies reviewed and research has also been

severely lacking with regards to the other regions. A synopsis of each of the seven world regions listed in Table 2 is provided in the subsequent sections.

### **North America**

An overwhelming majority of the studies focused on consumers from the North American region, particularly from the United States. Since most academic journals originate from the United States, the country is frequently used as a benchmark for research practices, including cross-national studies. This common practice becomes problematic when analyzing or comparing other cultures and nations along similar premises. Researchers must consider the appropriateness of the research design developed within and for the analysis of one culture towards the study of a different cultural setting. The generalizability of results from a single culture towards other cultures is also considered questionable.

Despite these issues, consumers from the United States currently enjoy a vast selection of foreign and domestic goods; however increases in outsourcing, economic fluctuations and other current events may shift U.S. consumer perceptions and purchase intentions of foreign products. For example, rises in foreign direct investment within the United States should warrant further investigation of American consumer attitudes toward these foreign direct investments and their products (Mascarenhas and Kujawa 1998).

### **Europe**

Studies of European consumers account for over 40% of the studies reviewed. Several significant changes have occurred within the past decade that directly affect trade practices among these countries and have warranted research (Balabanis and

Diamantopoulos 2004; Huddleston, Good and Stoel 2001; Orth and Firbasová 2003).

East European markets are expanding due to political and economic transformations from a communist planned market system to a free market system (Leonidou *et al.* 1999; Ziamou *et al.* 1999). The collapse of the Soviet Union has also provided new opportunities for multinational firms to enter CIS countries (i.e., the Commonwealth of Independent States).

Aside from political shifts, the movement towards a single European Union market is also creating new trade opportunities (Peris *et al.* 1993). Research has provided evidence that European goods are favored among Europeans and are ranked higher than Japanese or American goods in product evaluations by European consumers (Schweiger, Häubl and Friederes 1995). This finding suggests that European marketing managers may benefit by making the country of origin for their goods salient within these markets. Consumer ethnocentrism also appears to be significant at the individual country level within Europe. For example, studies have established Poland as an emerging market with high demand for consumer products; however there is evidence of strong consumer ethnocentrism influencing consumer purchase decisions (Marcoux, Filiatrault and Chéron 1997; Huddleston, Good and Stoel 2001).

## **Asia**

Seven Asian countries and the Southeast Asian region were investigated with the most research emphasis targeted at Chinese and South Korean consumers. Aside from Japan, most of these countries are considered as emerging economies that have recently gained the interest of foreign firms seeking new consumer markets. According to Zhang (1996), China is considered as a newly emerging economic market and a less developed

country; therefore its consumers rely heavily on country-of-origin information to evaluate products and make purchase decisions. India, another newly emerging market, is experiencing a rapid growth of middle class consumers that are more discriminating towards product attributes than its other consumer classes (Bandyopadhyay 2001).

Kaynak, Kucukemiroglu and Hyder (2000) contend that developed countries are over-saturated with imported goods; however developing countries, such as Bangladesh, rely more heavily on imports and attract more attention from foreign firms seeking to enter less competitive markets with their goods and services.

### **South Pacific**

Research of Australian and New Zealand consumer perceptions has been modest since the 1990s, with three-fourths of these studies investigating Australians. One study suggested that when purchasing foreign products, Australian consumers placed more emphasis on the product's quality, value for the money and price than country-of-origin information (Fischer and Byron 1997). Quester and Chong (2001) examined the influence of acculturation of Australian-Chinese consumers upon their evaluation and purchase of foreign products. The effect of acculturation was moderated by both the age and income of these consumers. By examining consumers from New Zealand, Watson and Wright (2000) investigated the effects of country-of-origin information, cultural similarity and consumer ethnocentrism upon their attitude and purchase intention of foreign products. On a similar note, Lawrence, Marr and Prendergast (1992) studied New Zealand consumers to assess the influence of country of origin, product familiarity, age, income, occupation and gender upon their product evaluations. According to the literature

reviewed in this study, other island chains of the South Pacific region (e.g., Indonesia, Micronesia and New Guinea) have not been researched.

### **Africa**

There is a significant lack of research conducted on African consumer perceptions and purchase of foreign goods. Of the studies included in the literature review, Ghana and Nigeria were the only two African countries whose consumers were evaluated. Although the primary focus was on consumer evaluation of goods from countries within various stages of industrial development, findings on consumer ethnocentrism were mixed for Nigerian consumers. Festervand and Sokoya (1994) suggested that the presence of strong Nigerian consumer ethnocentrism was due to a national sentiment towards preserving local jobs. On the other hand, Agbonifoh and Elimimian (1999) provided significant evidence of reverse consumer ethnocentrism in Nigeria due to an overall disdain for poorly made goods from this less industrialized country.

### **Latin America**

The articles included in this literature review investigated consumer perceptions from only two Latin American countries, Mexico and Venezuela. Despite this deficiency, trade has increased dramatically through governmental efforts, particularly NAFTA, which warrants more studies of foreign product perceptions in this region (Chao 2001; Bailey and Gutierrez de Pineres 1997; Richey, Rose and Dominguez 1999). The similarities of Mexican consumer profiles and consumer ethnocentrism with U.S. and Canadian consumers indicate potential for the use of standardized marketing strategies for these three regions. As for product manufacturing, goods produced in Latin American countries are typically perceived as low quality; however production is frequently

outsourced to these countries in efforts to reduce labor costs. Further investigation of consumer attitude towards products made in Latin America by companies from the industrialized countries is needed.

### **Middle East**

Two studies of Middle Eastern consumers were identified among the articles reviewed, despite the fact that foreign trade flourishes within Saudi Arabia since the country enjoys one of the largest consumer consumptions of foreign products in the world (Bhuian 1997). Research opportunities abound with regards to assessing subcultural similarities in purchasing behavior, consumer ethnocentrism and its potential interactions with specific demographic variables as well as the influence of animosity and current events towards product attitude and purchase.

## **FOREIGN PRODUCTS**

As mentioned previously, the purpose of this dissertation is to examine the relationships between key determinants of consumers' perceptions of and their likelihood to purchase foreign products; therefore the literature review process specifically screened articles for consumer evaluations of products from other countries. Articles relating to services, business to business marketing and other topics that do not fit these screening criteria were omitted from further investigation. The products chosen by the researchers for analysis within the selected articles can be categorized along several dimensions.

### **Specific Product Categories**

Specific product types are commonly chosen by researchers as the units of analysis to gauge consumer reactions to foreign products and country-of-origin effects.



According to Papadopoulos and Heslop (1993), “consistent findings of country-of-origin effects are found over a wide variety of products: cars; personal computers; VCRs, CD players, SLR cameras, pocket pagers, telephones, wrist watches; wearing apparel from socks to blouses and dress shirts; desk pens; leather wallets; glassware; fruit juice and coffee beans; cigarette brands; sanitary pads; and industrial product, such as lift trucks, dictation equipment and paint” (p. 122). These products are frequently selected from pretest results where respondents self-generate a common product from a country (Ziamou *et al.* 1999). This practice allows for the unaided recall by consumers where country-of-origin information may have a high level of relevancy for specific product categories.

Liefeld (1993) documented that the saliency of country-of-origin effects on consumer perceptions may be dependent upon product type. For example, Bandyopadhyay (2001) chose to evaluate consumer perceptions of electrical and electronic products for their relevance as status symbols within the emerging Indian market. Few researchers have also used generic products, such as glass and cloth for consumer evaluation in an attempt to control for product-quality biases (Schooler 1965; Schooler and Wildt 1968; Schooler and Sunoo 1969). In Papadopoulos and Heslop’s (1993) overview of research on country-product images, researchers have indicated a potential relationship between product type and the magnitude of the country-of-origin effects. They noted that “specifically, the eta values for technically complex products, fashion-related products, and expensive products appear to be larger than those for products low in technical complexity, inexpensive, or not fashion oriented” (p. 127).

Other studies include a variety of product categories to determine whether country-related variables exhibit a product-specific effect or a halo effect upon product evaluations (Leonidou *et al.* 1999) while other studies also investigate the possibility of a summary effect (Han 1989). While a product-specific effect means that the effect only occurs for a specific product or product category, a halo effect is present when the country's image influences the consumer's beliefs about all products from that country (Manrai, Lascu and Manrai 1998). For a summary effect to occur, the consumer transfers her evaluations from products that she has consumed towards all products from that country (Han 1989). In other words, if the consumer has positive evaluations about these products, they may develop an overall positive evaluation towards all products from that country.

More recent research efforts tend to focus on the comparison of multiple product categories within single studies, such as automobiles and blenders from both Germany and South Korea (Parameswaran and Pisharodi 1994) or Japanese, Canadian and Mexican stereotypes placed within German and South Korean automobiles (Bluemelhuber, Carter and Lambe 2007). Manrai, Lascu and Manrai (1998) categorized 18 consumer products into groups of convenience goods (alcohol, cheese, chocolate, fruit, meat products, paper products and shampoo) shopping goods (art/entertainment, clothing, fashion design, leather goods, perfume, scarf/tie and shoes) and luxury goods (automobiles, banking/finance, china/crystal and electronics/appliances) in order to investigate the interaction of country of origin and product category on consumer evaluations of these products. Another study carefully selected cars, food, TVs, toiletries, fashion wear, toys, do-it-yourself tools and furniture because these items are typically

imported, have domestic versions and are important expenditures for consumers from the United Kingdom (Balabanis and Diamantopoulos 2004). Overall the most popular products of analysis in both single or multiple product studies have been cars, electronic equipment, food, clothing and shoes.

### **Global Product Image**

In addition to examining specific product categories, several researchers have made country-related assessments based on a “global” evaluation of all products from a particular country (e.g., Reiersen 1966; Nagashima 1977; Kaynak and Cavusgil 1983; Garland and Crawford 1985; Papadopoulos *et al.* 2000; Laroche *et al.* 2005). For example, Papadopoulos *et al.* (2000) justified their use of global product evaluations by emphasizing that the focus of their research is to understand country-of-origin image rather than obtain product-specific evaluations. While product images may vary at lower levels of specificity for various product categories, these authors contend that overall evaluations of product images tend to stay in line with the country’s overall image.

Klein, Ettenson and Morris (1998) also utilized general buying measures to differentiate the effects of consumer ethnocentrism and animosity upon the likelihood of future purchases of products from specific foreign countries. In this study, the authors asked respondents to indicate their opinions about products in general from a particular country (e.g., “Whenever possible, I avoid buying products from Japan”). Subsequent research studies have followed suit with this approach by asking consumers about their likelihood to purchase products in general from the disliked country (e.g., Ang *et al.* 2004; Jung *et al.* 2002; Hinck 2004), thus “implicitly assuming a ‘general’ effect of

animosity independent of the specific product category” (Riefler and Diamantopoulos 2007).

While analyzing consumer perceptions of a specific product category provides a more focused approach to analyzing consumer choice and developing managerial applications, many researchers agree that the effects of country-related variables upon the global product image may be generalized across most product categories of goods from that country. This dissertation is primarily concerned with the development of a generalized model of consumer receptivity of foreign products and seeks to identify the key variables of the model and their relationships with each other. Future research endeavors will include the application of the model towards specific product categories as well as consumers from various nationalities.

## **CONSUMER RECEPTIVITY**

Consumers typically determine if a product is domestic or foreign through their cognitive processing of country specific information (Papadopoulos and Heslop 1993). “This information can be inferred from brand and company names, from product labels, and from linguistic, visual and aural symbols” (Klein and Ettenson 1999, p. 6). All of the studies within this literature review were specifically evaluated for potential variables influencing consumer perceptions and purchase of foreign products. The nature of their relationships was categorized in terms of direct effects, indirect effects and moderating effects. These variables were then prioritized based on their frequency of effects upon each of the four stages of the consumer purchase process. Table 3 illustrates the primary

variables identified within the articles from the literature review that exhibit main effects toward each of these stages.

**TABLE 3**  
**Main Determinants of Foreign Product Perceptions and Purchase**

<b>The Consumer Choice Process</b>	<b>Articles</b>	
<b>Stage 1: Overall evaluation of the foreign product</b>	<b>Freq.</b>	<b>%</b>
1. Country-of-origin image	51	50.5
2. Specific product attributes	17	16.8
3. Consumer ethnocentrism	13	12.9
4. Brand image	11	10.9
5. Product price	8	7.9
<b>Stage 2: Attitude towards the foreign product</b>		
1. Country-of-origin image	14	13.9
2. Consumer ethnocentrism	10	9.9
3. Product evaluation	3	2.9
<b>Stage 3: Intention to buy the foreign product</b>		
1. Country-of-origin image	9	8.9
2. Consumer ethnocentrism	7	6.9
3. Animosity	6	5.9
4. Product evaluation	5	4.9
5. Attitude towards the foreign product	4	4
<b>Stage 4: Foreign product purchase decision</b>		
1. Purchase intention	9	8.9
2. Country-of-origin image	7	6.9
3. Consumer ethnocentrism	2	2
4. Animosity	2	2
5. Product price	2	2
6. Perceived responsibility of helping	2	2

The literature review revealed that very few conceptual models have been developed to categorize determinants of consumer perceptions and purchase of foreign goods. Two articles were identified as studies proposing conceptual frameworks, both of which primarily focused on the influences of the country-of-origin variable. Samiee (1994) proposed a model that outlines individual, product-market and environmental factors influencing the stereotyping effect of a country of origin. Factors within an

individual consumer consist of brand familiarity and experience, the level of purchase decision involvement and ethnocentrism/patriotism. Product-market factors would be the type, characteristics and attributes of the product, brand image, the reputation of intermediaries, labeling requirements and market demand. Global markets, level of national economic development and the political, social and cultural influences make up the environmental factors influencing country stereotyping. This stereotyping effect will subsequently influence the consumer's decision to purchase the product, which will impact the brand's profitability and shape future managerial considerations about global market strategies.

Three years later, Janda and Rao (1997) developed a model to examine the impact of country-of-origin related stereotypes and personal beliefs on a consumer's overall product evaluation. These cultural stereotypes are generated from socialization influences such as family, friends and media. Personal beliefs are based on descriptive judgments from active direct experience with the product as well as inferential judgments from past experiences with the product. The authors include a direct causal relationship from product evaluations to product purchase and from purchase to use. A feedback loop from product use to the inferential dimension of product beliefs is also represented within their model, indicating a continuous learning process that refines the consumer's product evaluations through product experience.

Studies have not attempted to develop a framework that identifies the major determinants of each stage of the consumer purchase behavior for foreign products. While both of the conceptual studies (Samiee 1994; Janda and Rao 1997) proposed antecedents of product evaluation, they did not identify determinants for consumer

attitudes toward or purchase of the product. Similarly, the empirical studies included in the literature review focused on specific stages of the consumer purchase decision process rather than attempting to provide a comprehensive framework of the process. This dissertation seeks to model the main effects and potential interrelationships of primary variables affecting consumer evaluation of and attitude towards foreign products as well as their likelihood to purchase these products. In developing a testable model, the study has incorporated specific guidelines designed to increase the parsimony of the framework while maintaining internal consistency and applicability.

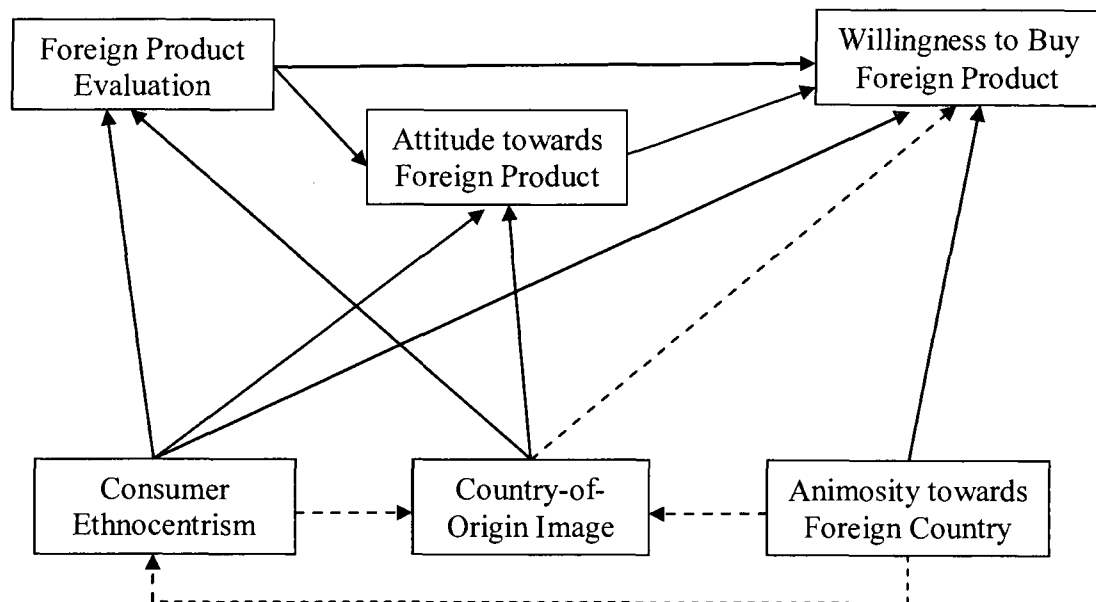
Due to the difficulty of measuring consumer's purchase of products, the consumer's willingness to buy the foreign product is used as a viable proxy for the actual purchase. Several studies have previously validated specific variables, including purchase intention (Han 1988), likelihood of purchase (Liefeld 1993), willingness to buy (Klein, Ettenson and Morris 1998) and reluctance to buy (Suh and Kwon 2002) to serve as acceptable indicators of future purchase behavior. Researchers have also routinely conducted studies whereby the foreign products under investigation were non-specific, thus insinuating that product-country images tend to be holistic in nature and affect consumer perceptions across most product categories (Reiersen 1966; Kaynak and Cavusgil 1983; Papadopoulos *et al.* 2000; Ang *et al.* 2004; Hinck 2004; Laroche *et al.* 2005). By examining a general product image from specific foreign countries, product-specific constructs (e.g., brand image, product attribute evaluations and price) that were identified as determinants are not measured within this study.

## THE DERIVED MODEL

Figure 1 illustrates the framework of key determinants affecting consumer perceptions of and preference for foreign products. The model is derived from the main findings identified and supported by the studies included in the literature review and consists of the primary variables affecting the first three stages of the consumer purchase decision process. It illustrates the direct influence of product evaluation upon purchase intention and the mediation of this relationship by the consumer's attitude towards the foreign product. The model also clearly segregates the relationships that have a preponderance of support from the relationships that warrant further investigation because of mixed results or lack of empirical support.

**FIGURE 1**

**Framework of Previous Empirical Evidence**



Note: Solid arrows denote extensive research support, while dashed lines denote mixed or low empirical support.



The causal paths within this framework represent main effects between key variables and each of the three distinct stages that were identified in the literature review. The relationships that are represented by solid arrows have been substantially supported and are therefore considered as having primary explanatory power. While attitude formation is generally preceded by beliefs about the product (Erickson, Johansson and Chao 1984; Manrai, Lascu and Manrai 1998), a direct influence of product evaluation upon purchase intention is also supported within several of the studies in this review (Chinen, Jun and Hampton 2000; Hui and Zhou 2002; Orbaiz and Papadopoulos 2003). This suggests that product judgments can affect a consumer's willingness to buy the product in the absence of an attitude about the product or before the attitude is actually formed. Other studies have posited attitudes toward foreign products as the independent variable and examined its influence upon consumers' willingness to buy or their actual purchase behavior (Balabanis *et al.* 2001).

The purpose of this research is to reevaluate and refine the derived model by examining the relationships between country-of-origin image, consumer ethnocentrism and animosity. The significance of these three constructs is posited to differ at each stage of the consumer buying process, namely product evaluation, attitude formation and willingness to purchase the foreign product. The following three hypotheses have received substantial support from previous research and serve as the baseline model representing the causal relationships of these three stages.

**H<sub>1a</sub>:** The consumer's evaluation of the foreign product positively influences the consumer's attitude towards the foreign product.

**H<sub>1b</sub>:** The consumer's evaluation of the foreign product positively influences the consumer's willingness to buy the foreign product.

**H<sub>1c</sub>:** The consumer's attitude towards the foreign product positively influences the consumer's willingness to buy the foreign product.

## **COUNTRY-OF-ORIGIN IMAGE**

Country-of-origin image (i.e., country image, country-of-origin evaluation, country-of-origin effect and product-country image) was one of the earliest variables assessed within studies that examined consumer perceptions of foreign products (Nagashima 1977; Schooler 1965, 1971) and has continued to be heavily researched in the areas of consumer behavior, marketing and international business (Peterson and Jolibert 1995). Entire books (e.g., Kotler, Haider and Rein 1993; Papadopoulos and Heslop 1993; Gold and Ward 1994; Jaffe and Nebenzahl 2001) and chapters in international marketing research books (e.g., Papadopoulos and Heslop 2003; Srinivasan and Jain 2003) have been solely dedicated to understanding country-of-origin image, and the construct has received the distinction from some authors as being the “most researched international aspect of consumer behavior” (Tan and Farley 1987, p. 540).

While there is considerable disagreement among researchers about the precise definition of country of origin (given the nature of globally-produced products), it is often considered as the country of creation or association with a product (Okechuku and Onyemah 1999). Papadopoulos (1993) argues that an object's image is a direct result of an individual's perception of it and the phenomena surrounding it. Furthermore, Papadopoulos *et al.* (1988, 1990 and 2000) suggest that the consumer perceptions of a product's country-of-origin consist of cognition (including beliefs about the country's technological and industrial superiority), affect (feelings about the country and its people) and conation (the consumer's desired level of interaction with the country).

An overwhelming majority of country-of-origin image studies provide support that country-of-origin image does indeed affect consumer product evaluations as well as their attitudes toward the product. Bilkey and Nes (1982) conducted a literature review to assess the effects of country-of-origin information and concluded that “all of the studies reviewed indicate that country of origin does indeed influence buyers’ perceptions” (p. 94). They found that the majority of the studies they reviewed had utilized either consumer evaluation of or attitude towards the product as the outcome variable. A decade later, Peterson and Jolibert (1995) performed a meta-analysis of country-of-origin effects that confirmed the significance of country-of-origin image as a predictor of product perceptions. When compared to the effect of country-of-origin image upon purchase intention, the authors note that “the effect size for purchase intention (0.19) was significantly less than that for quality/reliability perceptions (0.30). Hence, in general, country-of-origin image was a stronger predictor for quality/reliability perceptions than it was for purchase intentions” (p. 890), which suggests a diminishing effect of country-of-origin image due to a hierarchical ordering of the outcomes that are influenced by the variable (Pharr 2005).

Since 1995, a few authors have attempted to model the order of outcomes (e.g., product evaluations, attitudes toward the product, purchase intention and purchase choice) relating to country-of-origin evaluations. While most authors agree that country-of-origin image has a direct influence on product evaluations, many authors suggest that the country-of-origin image indirectly affects purchase intention through other variables, such as product evaluation, brand image, brand equity and perceived value (Hui and Zhou 2002; Parameswaran and Pisharodi 2002; Cervino, Sanchez and Cubillo 2005).

Several antecedents of country-of-origin image have been identified to explain the differences in country-of-origin evaluations and can be categorized as being either individual-based dimensions or country-based dimensions (Pharr 2005). Verlegh and Steenkamp (1999) tested two country-based antecedents, namely the country's level of economic development and its participation in multinational production arrangements. They found that only the differences in national economic development had an effect on subjects' country-of-origin image and product evaluations. As for subject-based antecedents, consumer ethnocentrism (Orth and Firtbasová 2003; Balabanis and Diamantopoulos 2004), individualism/collectivism (Gürhan-Canli and Maheswaran 2000), power distance (Insch and McBride 2004), country stereotyping (Liu and Johnson 2005) and the degree of assimilation of host country stereotypes (Parameswaran and Pisharodi 2002) may help to explain differences in country-of-origin evaluations.

Studies have also attempted to determine how consumers process country-of-origin information when considering a product. According to Ahmed *et al.* (2004), a consumer's country-of-origin evaluation is typically processed in one of two ways, as a halo effect or as a summary construct. A halo effect means that the consumer uses her existing feelings towards a country to create an overall image of products from that country. In contrast, the summary construct is developed when the consumer uses her familiarity and evaluation of products from a particular country to generate an overall country-of-origin evaluation. For example, Han (1989) suggests that the consumer's use of country-of-origin information depends on the degree of her familiarity with the product or product category. Consumers who are unfamiliar with the product may use country-of-origin information as a stereotype measure for other product attributes;

therefore a positive country-of-origin evaluation will lead to an overall positive evaluation of the product. For consumers familiar with the product category, country-of-origin image serves as a heuristic cue for those consumers wishing to process less information in order to make a purchase decision. For example, consumers who consider themselves as knowledgeable in consumer electronics may have an affinity for Japanese electronics in general, based on their positive experiences with specific Japanese electronic components in the past.

Although country-of-origin image is commonly in reference to the location of production, the country associated with the product's origin may not necessarily be the place of manufacture or assembly of the product itself (Bandyopadhyay 2001). Country-of-origin stamps have been legally mandated in foreign trading, raising consumer awareness of the product's country-of-origin for the past two decades (Strutton and Pelton 1993). As outsourcing and cross-border manufacturing become more prevalent, hybrid and FDI-based product offerings are generating research interest. Some studies have attempted to parse the country-of-origin variable into separate distinct dimensions, such as country-of-manufacture, country-of-assembly, country-of-parts and country-of-design, thus producing interesting results from this decomposition of the country-of-origin concept. For example, country-of-assembly, country-of-parts and country-of-design have been demonstrated to have an effect on consumer perceptions of product quality (Insch and McBride 1998; Chao 2001). In terms of relative strength, country-of-parts carries more weight than country-of-assembly or country-of-design in explaining consumer evaluations of the product (Insch and McBride 2004; Chao 2001).

When country-of-origin information is not specified, consumers generally associate the country-of-origin with the country-of-manufacture for that brand or product (Nebenzahl and Jaffe 1996). The differences in consumers' process of country-of-origin information may vary according to when they typically adopt new products in relation to the diffusion of innovations. While innovators and early adopters of new technology tend to be interested in a product's country-of-manufacture, the majority and laggards (those consumers who adopt a product in the later stages of its product life cycle) are more likely to assess its country-of-brand-origin when evaluating the product (Chen 2004). Ironically, consumers' perceived country-of-origin is often incorrect and can differ from the actual country of production as a result of imperfect information and misconceptions within the marketplace (Pharr 2005). Several studies have confirmed that under nonexperimental conditions, the ability to accurately identify the country-of-origin of North American and Asian brands is universally low for consumers (Madden 2003; Liefeld 2004; Samiee, Shimp and Sharma 2005).

Moreover these authors found evidence that these consumers did not use country-of-origin information as often as other types of product information in making purchase decisions. Other informational cues, including product type (Eroglu and Machleit 1989), store prestige (Chao 1989), product warranty (Li, Murray and Scott 2000) and price (Ettenson, Wagner and Gaeth 1988), have been found to influence country-of-origin evaluation or moderate the effect of country-of-origin image on overall product evaluations (Chao, Wührer and Werani 2005). Another cause of a possible decrease in the relevance of country-of-origin image as a determinant of product evaluation may be due to the preponderance of global branding and cross-national business alliances that

have emerged within the last two decades (Bluemelhuber, Carter and Lambe 2007). These international strategies make it even more difficult for consumers to determine which country is associated with the product or brand in question. Depending on the information that is available to the consumers, they seek a degree of fit or congruency among the images of these countries, the brands and/or the products to affect their attitudes toward this strategic alliance as well as each of the individual companies participating in the alliance (Simonin and Ruth 1998). Another reason for the lack of country-of-origin effects upon purchase decision may be due to the number of product cues available to the consumer. Studies have found that alternative cues, such as price and brand play a more crucial role in predicting customer acceptance of products, suggesting that country-of-origin is more salient to those consumers with less product information (Olsen *et al.* 1993). Nevertheless country-of-origin effects continue to be heavily investigated as an important construct in consumer behavior, particularly in ascertaining product judgments.

Based on the findings of previous research, it is expected that country-of-origin image has a positive relationship with the consumer's product evaluations. It generally serves as a product attribute cue that may assist the consumer in making judgments about the overall evaluation of product, inferred from product-country assessments as well as the image of the country itself. Consumers also rely on country-of-origin image when developing an attitude about the foreign product; however it does not directly influence her willingness or decision to purchase the product.

**H<sub>2a</sub>:** Country-of-origin image positively influences the overall evaluation of the foreign product by the consumer.

**H<sub>2b</sub>:** Country-of-origin image positively influences consumer attitude towards the foreign product.

## **CONSUMER ETHNOCENTRISM**

Although governments have continually reduced tariffs and other trade barriers to encourage trade among nations, one form of a non-tariff barrier that tends to endure among citizens is consumer ethnocentrism (Shankarmahesh 2006). The term “ethnocentrism” was initially defined by Sumner (1906) as “the view of things in which one’s own group is the center of everything, and all others are scaled and rated with reference to it...Each group nourishes its own pride and vanity, boasts itself superior, exalts its own divinities and looks with contempt on outsiders” (p. 13). Ethnocentric tendencies can occur in all manner of social groups that may result in an “us against everyone else” mentality that exhibits a high level of pride in their group membership status and an equally strong contempt towards non-group members (LeVine and Campbell 1972). In addition, ethnocentrism involves symbolic items that become a source of attachment and unified pride for an ethnic or national group. These symbols are used to differentiate the group from others, whereby the symbolic items of rival groups are judged critically and may generate contempt between groups. In addition to group pride, other consequences of harboring ethnocentric tendencies may include racial discrimination, sectionalism, patriotism and religious prejudices (Sharma, Shimp and Shin 1995).

Consumer ethnocentrism is a derivation of the original concept of ethnocentrism and refers to the consumer’s belief that buying foreign products will potentially result in a domestic jobs reduction and economic damage (Shimp and Sharma 1987); therefore



domestic consumers who are ethnocentric would consider the purchase of foreign goods as inappropriate, immoral and unpatriotic. They typically would not discriminate towards specific countries, but would have a general disdain for all non-domestic products, regardless of their country-of-association. Shimp and Sharma (1987) also contend that consumer ethnocentrism is a behavioral pattern that is socialized during early childhood years and is fairly inelastic to other product attributes, such as price and quality. This inelasticity is a stark contrast to country-of-origin evaluation and its diminishing effect upon product perceptions when additional product attributes become available to the consumer. While commonly studied in the context of consumer perceptions and behavior, there is also evidence of consumer ethnocentrism existing among buyers within the business-to-business markets as well (Crawford and Lamb 1981).

In addition to establishing a definition of consumer ethnocentrism, Shimp and Sharma (1987) were also responsible for developing the CETSCALE to dimensionalize and measure consumer ethnocentrism. Since its inception, the CETSCALE has been validated in several studies investigating both national and regional dimensions of the U.S. culture. Shimp and Sharma originally used their CETSCALE to evaluate the ethnocentricity of regional cultures within the United States of America and determined that respondents from Denver, Detroit and the Carolinas exhibited higher levels of ethnocentrism than respondents from the Los Angeles area. Another author found evidence that the U.S. West Coast region is less ethnocentric than the country's Mid-West region (Howard 1989).

The CETSCALE has also been used in other country settings to determine potential relationships between consumer ethnocentrism and various outcome variables.

Klein, Ettenson and Morris (1998) surveyed mainland Chinese consumers and their propensity to purchase Japanese durable goods. They provide support that consumer ethnocentrism and consumer animosity towards a foreign country are two distinct constructs with different outcomes relating to consumer perception and purchase of foreign products. Additionally the CETSCALE has been validated with respondents from Russia (Good and Huddleston 1995; Durvasula, Andrews and Netemeyer 1997), South Korea (Sharma, Shimp and Shin 1995), Spain (Luque-Martinez, Ibanez-Zapata and del Barrio-Garcia 2000) and Poland (Good and Huddleston 1995).

Not all researchers have adopted the CETSCALE to measure consumer ethnocentrism within their studies. Some protest that, since the instrument was originally developed and validated using U.S. respondents, it is best suited for the study of American culture; therefore these researchers have developed their own consumer ethnocentrism instrument that they consider as more appropriate for analyzing other cultures. One example of an alternative measurement of consumer ethnocentricity can be found in Festervand and Sokoya's (1994) study of Nigerian consumers. They created an attitudinal scale of ethnocentrism to compare how Nigerians feel towards the socio-political and religious ideologies of exporting nations in contrast to their own ideologies.

Several constructs have been posited as antecedents of consumer ethnocentrism and can be sorted into four categories, namely social-psychological, political, economic and demographic antecedents (Shankarmahesh 2006). The socio-psychological variables that positively affect consumer ethnocentrism include worldmindedness (Rawwas, Rajendran and Wuehrer 1996), cultural openness (Sharma, Shimp and Shin 1995), patriotism (Sumner 1906), conservatism (Sharma, Shimp and Shin 1995), collectivism

(Hofstede 1984) and materialism (Belk 1984). In the Klein, Ettenson and Morris (1998) study, international animosity was posited as a potential socio-psychological antecedent of consumer ethnocentrism and empirical research by Nijssen and Douglas (2004) was conducted to ascertain the nature of the relationship between the two constructs. They argue that, “according to LeVine and Campbell (1972), an outgroup’s warlike and hostile behavior will enhance feelings of ethnocentrism, and hence negative attitudes towards objects, people, ideas or products from the aggressor country. Consequently, war and economic animosity will lead to reluctance, in some cases refusal to buy products from the aggressor country, as well as reinforcing consumer ethnocentrism” (p. 28). Political antecedents also tend to be related to consumer ethnocentrism and include political propaganda, the proximity, size and power of out-groups and leader manipulation (Rosenblatt 1964). Another study identified the history of oppression within a country as a potential antecedent of consumer ethnocentrism (Good and Huddleston 1995).

In addition to socio-psychological and political antecedents, economic antecedents tend to influence consumer ethnocentrism and include capitalism (Rosenblatt 1964), lower stages of national economic development (Good and Huddleston 1995; Durvasula, Andrews and Netemeyer 1997) and an individual’s belief of an improving national economy and better personal finances (Klein and Ettenson 1999). Good and Huddleston (1995) also found that as the country’s stage of economic development rises from a poor domestic economy to an intermediate level of economic growth, consumer ethnocentrism becomes more prevalent among its citizens.

Several demographic variables have been studied with relation to consumer ethnocentrism. As for age and consumer ethnocentrism, research findings are mixed with

studies indicating a positive relationship (Dornoff, Tankersley and White 1974; Han 1988; Klein and Ettenson 1999; Orth and Firbasová 2003), a negative relationship (Schooler 1971; Bannister and Saunders 1978) and no relationship (Festervand *et al.* 1985; Sharma, Shimp and Shin 1995) with consumer ethnocentrism. The effect of gender is not as inconclusive as age, with most of the studies suggesting that women are more ethnocentric (Eagly 1978; Wall and Heslop 1986; Han 1988; Howard 1989; Bruning 1997), one study providing support that men are more ethnocentric (Bannister and Saunders 1978) and a few studies indicating that there is no relationship between gender and consumer ethnocentrism (Dornoff, Tankersley and White 1974; Good and Huddleston 1995; Balabanis *et al.* 2001). Most studies investigating education (Dornoff, Tankersley and White 1974; Festervand *et al.* 1985; Nishina 1990; Klein and Ettenson 1999) and income (Sharma, Shimp and Shin 1995; Klein and Ettenson 1999; Good and Huddleston 1995; Bruning 1997) provide evidence of negative relationships with consumer ethnocentrism. Consumers with less formal education and income tend to be more ethnocentric than their more educated, wealthier counterparts. Only a few studies have measured race and social class as potential consumer ethnocentrism antecedents. In terms of race, there tends to be no relationship (Klein and Ettenson 1999; Piron 2002); however social classes clearly indicates more ethnocentrism present in blue-collar (Han 1998) and working class (Klein and Ettenson 1999) individuals than in white-collar and middle class people. Those workers who belong within a union are more likely to be more ethnocentric than those who are not union members (Klein and Ettenson 1999).

As for consequences, consumer ethnocentrism has been found to negatively affect consumer evaluations of foreign products (Shimp and Sharma 1987; Klein, Ettenson and

Morris 1998; Klein 2002) as well as their attitudes toward foreign products (Sharma, Shimp and Shin 1995; Zarkada-Fraser and Fraser 2002). While several studies have provided a preponderance of evidence to support a positive effect of consumer ethnocentrism on their intention to buy domestic products and services over their foreign counterparts (Han 1988; Herche 1992; Olsen, Granzin and Biswas 1993; Klein, Ettenson and Morris 1998; Suh and Kwon 2002), a few studies suggest that consumer ethnocentrism is an antecedent of country-of-origin evaluation (Brodowsky 1988; Samiee 1994; Gürhan-Canli and Maheswaran 2000). These authors contend that high levels of consumer ethnocentrism reduce the ability of consumers to objectively process country-of-origin information. For example, Brodowsky (1988) argue that consumers harboring low levels of consumer ethnocentrism will use country-of-origin cues for objective product evaluation. Highly ethnocentric consumers were shown to systematically view the foreign country-of-origin in a negative light, thus producing negative foreign product evaluations.

Another plausible theory views consumer ethnocentrism as an interaction variable affecting all of the relationships leading to the purchase decision by the consumer. Higher levels of CET will lead to more saliency and importance of COO information to these consumers, thus increasing the strength of the effects that the posited determinants have upon consumers' receptivity towards a foreign product. For example, consumers with high levels of consumer ethnocentrism will seek out COO information and as a result, may have lower evaluations of and more unfavorable attitudes toward the foreign product. These consumers will also be less willing to purchase the foreign products than the consumers with low levels of consumer ethnocentrism. In summary, consumer

ethnocentrism is proposed to interact with each part of the consumer purchase decision process from product evaluation to attitude formation and purchase intention.

Furthermore, these relationships will increase in magnitude in conditions where consumer ethnocentrism is high.

**H<sub>3a</sub>:** As consumer ethnocentrism increases, the magnitude of the effect of country-of-origin image on the consumer's evaluation of the foreign product increases.

**H<sub>3b</sub>:** As consumer ethnocentrism increases, the magnitude of the effect of country-of-origin image upon the consumer's attitude towards the foreign product increases.

**H<sub>3c</sub>:** As consumer ethnocentrism increases, the magnitude of the effect of consumer's evaluation of the foreign product on her attitude towards the foreign product increases.

**H<sub>3d</sub>:** As consumer ethnocentrism increases, the magnitude of the effect of consumer's evaluation of the foreign product on her willingness to buy the product increases.

**H<sub>3e</sub>:** As consumer ethnocentrism increases, the magnitude of the effect of consumer's attitude towards the foreign product on her willingness to buy the product increases.

## CONSUMER ANIMOSITY

International animosity refers to a consumer's dislike towards a foreign nation stemming from past and present military, political or economic events and is posited to negatively affect the consumer's purchase intention of goods associated with that country (Klein, Ettenson and Morris 1998). Over the past decade, "consumer animosity has gained considerable attention in international marketing literature as a determinant of foreign product purchase behavior" (Riefler and Diamantopoulos 2007, p. 87). In their recent literature review of the construct, the authors identified 15 empirical studies that address its conceptualization, measurement and potential relationships with other variables. Despite its recent popularity within marketing studies, the animosity construct

is a relatively nascent area of research that needs further exploration and refinement within cross-cultural consumer behavior and international marketing strategy.

Klein, Ettenson and Morris (1998) identified three broad categorizations of tensions between countries that create consumer animosity. War-related tensions are those arising from both past (e.g., World War I and II, Vietnam War, Korean War and the former Soviet Union's attempt to invade Afghanistan) as well as present military conflicts (e.g., conflicts between India and Pakistan for the Kashmir region and several ongoing Middle East conflicts, such as the U.S. invasion of Iraq and Afghanistan and the fighting between Palestine and Israel for the Gaza strip). Consumers may also be adversely affected by economic arguments and business-related tensions between their domestic nation and foreign countries (e.g., the disapproval of Asian sweatshops and dangerous Chinese products by U.S. consumers; import quotas recently placed upon Chinese made apparel by the European Union). Finally, political tensions can also serve as a strong source of consumer animosity towards another country. For example, Johansson, Ronkainen and Czinkota (1994) determined that many U.S. farmers harbor negative country-of-origin evaluations towards Russia. They found that political animosity towards Russia, strong U.S. sentiments and negative evaluations of products from a less industrialized country negatively affected the U.S. farmers' intentions to purchase Russian products.

The majority of the animosity studies have used Japan as the targeted country of consumer animosity. In the original study that developed the international animosity construct and related it to consumer product purchase behavior (Klein, Ettenson and Morris 1998), the authors evaluated Chinese consumers' war-related, economic-related

and general animosities toward Japan. Klein and Ettenson (1999) evaluated levels of economic-related animosity towards Japan by American consumers, but war-related and general animosities were not measured. To increase the application of the animosity model in other cultural settings, Shin (2001) investigated all three dimensions of animosity found within Koreans towards Japan and their reluctance to purchase Japanese products. In addition to Japan, war-related and economic animosities towards Germany by the citizens of the Netherlands were assessed (Nijssen and Douglas 2004). Political animosity was the focal point in the Russell (2004) study in comparing bidirectional animosity between American and French consumers as a result of opposing positions on the Iraq War. Two other studies (Jung *et al.* 2002; Ang *et al.* 2004) extended the animosity model by assessing economic-based animosities of consumers from Thailand, Indonesia, Korea, Malaysia and Singapore towards the two economic giants, Japan and the United States.

Klein, Ettenson and Morris (1998) contend that, while consumer ethnocentrism directly influences consumer evaluations and willingness to buy foreign products, animosity only affects the latter; therefore a consumer harboring animosity towards a country may have positive product judgments towards goods from that country, but will still prefer to buy products from another country. Other researchers disagree with this notion and contend that animosity negatively influences product judgments as well as purchase intention. For example, Baillargeon (2003) justifies that product evaluations are comprised of both cognitive and affective elements. Humans do not typically make completely objective judgments because they cannot separate affect from cognition. Zajonc (1980) delves further into the relationship between affect and judgments by



contending that affect precedes cognition upon the presentation of a stimulus. Berkowitz *et al.* (2000) argue that humans tend to mould their cognitive beliefs to what they are feeling, with aggression-based feelings being the strongest to emerge as an automatic response to an associatively linked stimulus. Given these arguments, it is rational to assume that animosity towards a country would have a negative influence on the country-of-origin related product cues by making the country-of-origin more salient to the consumer in the presence of other product cues and by adding subjectivity to the development of the consumer's overall evaluation of the product. Like highly ethnocentric consumers, individuals with higher levels of animosity toward a foreign country will actively seek out country-related information about the product and weigh this information more heavily when forming product perceptions and attitudes as well as making purchase decisions about products from that country. As with consumer ethnocentrism, animosity levels are proposed to interact with each part of the consumer purchase decision process by increasing the magnitude of these relationships when the degree of consumer animosity is high.

**H<sub>4a</sub>:** As animosity increases, the magnitude of the effect of country-of-origin image on the consumer's evaluation of the foreign product increases.

**H<sub>4b</sub>:** As animosity increases, the magnitude of the effect of country-of-origin image upon the consumer's attitude towards the foreign product increases.

**H<sub>4c</sub>:** As animosity increases, the magnitude of the effect of consumer's evaluation of the foreign product on her attitude towards the foreign product increases.

**H<sub>4d</sub>:** As animosity increases, the magnitude of the consumer's evaluation of the foreign product on her willingness to buy the product increases.

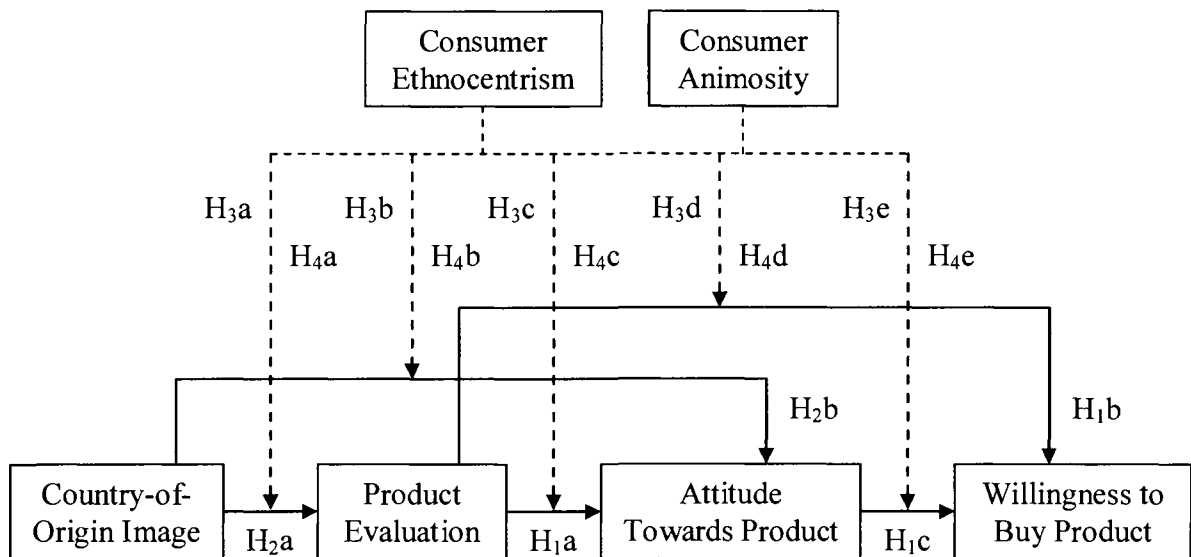
**H<sub>4e</sub>:** As animosity increases, the magnitude of the effect of consumer's attitude towards the foreign product on her willingness to buy the product increases.

## THE MODEL OF HYPOTHESES

Figure 2-2 illustrates the proposed model and the aforementioned hypotheses. It consists of the key antecedents affecting a consumer's willingness to purchase a foreign product, namely the consumer's overall evaluation of the product and her attitude towards the product. It illustrates the positive effects of country-of-origin image on both product evaluations and consumer attitudes and postulates interaction effects of both consumer ethnocentrism and foreign animosity upon all of these direct casual paths.

**FIGURE 2**

### Proposed Empirical Model



Note: Solid arrows represent direct effects and dashed arrows represent interactions.

## **CHAPTER 3: METHODOLOGY**

### **INTRODUCTION**

As noted earlier, the main contribution of this study is to uncover the key determinants of consumer perceptions of and purchase preferences for foreign products and examine potential interdependencies between these variables. As the complexity of these relationships increase, there is a greater need for a holistic approach to model testing. Unfortunately, very few studies examining multiple antecedents of foreign product evaluations have employed such modeling methods of statistical analysis (Pharr 2005). Testing these determinants together may provide some indication of the relative strength as well as the nature of their relationships within each stage of the consumer purchase decision process. The following research issues are addressed within this chapter; construct measurement, research approach, sample design, questionnaire design and administration, statistical analysis, and construct reliability as well as validity considerations.

### **CONSTRUCT MEASUREMENT**

The variables of interest in this dissertation will be measured using established scales from previous research studies and are listed in Tables 4 through 9. There are six primary constructs that are under investigation; product evaluation, attitude towards the product, willingness to buy the product, country-of-origin image, consumer ethnocentrism and animosity.

## Product Evaluation

The evaluation of the foreign product represents the overall cognitive evaluation of the product by the consumer and is measured by six items (Klein, Ettenson and Morris 1998; Darling and Arnold 1988; Darling and Wood 1990; Wood and Darling 1993).

These measures were assessed by seven-point Likert scales anchored by strongly disagree/strongly agree. Respondents will indicate their agreement with each statement by marking a score between 1 and 7, with 1 representing “strongly agree” and 7 representing “strongly disagree.” With the use of structural equation modeling, Klein, Ettenson and Morris (1998) tested the measurement properties of the construct and indicated acceptable fit of the indicators to the construct in addition to a high degree of construct reliability. Table 4 illustrates the six-item scale for the consumer’s evaluation of a foreign product, whereby the second item (lower quality) is reverse-coded.

**TABLE 4**

### **Scale Items – Product Evaluation**

1. Products made in \_\_\_\_\_ (*foreign country*) are carefully produced and have fine workmanship.
2. Products made in \_\_\_\_\_ (*foreign country*) are generally of a lower quality than similar products available from other countries.
3. Products made in \_\_\_\_\_ (*foreign country*) usually show a very clever use of color and design.
4. Products made in \_\_\_\_\_ (*foreign country*) show a very high degree of technological advancement.
5. Products made in \_\_\_\_\_ (*foreign country*) are usually quite reliable and seem to last the desired length of time.
6. Products made in \_\_\_\_\_ (*foreign country*) are usually a good value for the money.

### **Attitude Towards the Product**

According to Bruner and Hensel (1998), studies have utilized several bipolar adjectives to measure consumers' attitude towards a product or brand. The most common adjectives used are good/bad, favorable/unfavorable and pleasant/unpleasant. In this dissertation, measures of consumers' attitude towards the foreign product will be assessed by seven-point semantic differential scales with three pairs of anchors; negative/positive, unfavorable/favorable and bad/good (Osgood, Suci and Tannenbaum 1957; Simonin and Ruth 1998; Bluemelhuber, Carter and Lambe 2007). In a recent study that investigated U.S. consumers' attitude towards foreign car brands, foreign stereo brands and brand alliances, Bluemelhuber, Carter and Lambe (2007) reported Cronbach's alphas that indicate high internal consistency for these three attitude scale items. Table 5 lists the items measuring consumer's attitude towards a foreign product.

**TABLE 5**

#### **Scale Items – Attitude Towards the Product**

1. Negative/Positive.
2. Unfavorable/Favorable.
3. Bad/Good.

### **Willingness to Buy the Product**

A consumer's willingness to buy the foreign product consisted of six items on seven-point Likert scales anchored by strongly disagree/strongly agree (Klein, Ettenson and Morris 1998; Darling and Arnold 1988; Darling and Wood 1990; Wood and Darling 1993). For example, the respondent would mark a score of 1 to represent strong

disagreement with each statement and mark a 7 to indicate strong disagreement. Klein, Ettenson and Morris (1998) tested the measurement properties of the variable through the use of latent variable structural equation modeling (Jöreskog and Sörbom 1993). The authors reported goodness-of-fit measures which support an acceptable fit of the indicators to the construct. Table 6 reports the six-item scale for the consumer's willingness to buy the foreign product, all of which are reverse-coded with the exception of the first scale item.

**TABLE 6**

**Scale Items – Willingness to Buy the Product**

1. Whenever available, I would prefer to buy products made in \_\_\_\_\_ (*foreign country*).
2. I would feel guilty if I bought a \_\_\_\_\_ (*foreign country*) product.
3. I would never buy \_\_\_\_\_ (*foreign country*) products.
4. Whenever possible, I avoid buying \_\_\_\_\_ (*foreign country*) products.
5. I do not like the idea of owning \_\_\_\_\_ (*foreign country*) products.
6. If two products were equal in quality, but one was from \_\_\_\_\_ (*foreign country*) and one was from the United States, I would pay 10% more for the product from the United States.

**Country-of-Origin Image**

The country-of-origin image measurement was adopted from previous research (Papadopoulos, Marshall and Heslop 1988; Li, Fu and Murray 1997; Laroche *et al.* 2005) and consists of a nine-item, seven-point bipolar adjective scale that measures the three dimensions of the construct, namely country beliefs, people affect and desired interaction. Laroche *et al.* (2005) state that, “consistent with Papadopoulos *et al.* (1988, 1990), we

define country beliefs as consumers' beliefs about the country's industrial development and technological advancement. The concept of people affect refers to consumers' affective responses (e.g., liking) to the country's people. Finally, the concept of desired interaction reflects consumers' willingness to build close economic ties with the target country” (p. 98).

While there are numerous scales of country-of-origin image that have been utilized in international marketing research, most instruments fail to measure country-of-origin as a multi-dimensional construct (Johansson, Douglas and Nonaka 1985; Han 1989; Knight and Calantone 2000). Additionally scales often evaluated country image based on product-related measures rather than country-specific measures (Han 1989). This country-of-origin image scale provides three dimensions of country-related items that address a cognitive (country beliefs), affective (people affect) and conative (desired interaction) component of country image. Recently Laroche *et al.* (2005) used the scale to measure the country image of Japan and Sweden by North American consumers and reported respective alpha levels for all dimensions of the construct. Adequate goodness of fit statistics for the measurement model were also reported for both the Swedish and Japanese cases and the authors provided support for convergent and discriminant validities within their study.

The last point of interest concerns the scale's primary use within previous research. It has been successfully tested for its influence upon consumer evaluations and attitudes towards all products from foreign countries rather than towards specific product categories (Papadopoulos, Marshall and Heslop 1988; Laroche *et al.* 2005). Given these justifications, this three-dimensional country-of-origin image scale is well suited for the

purposes of this dissertation. Table 7 provides the nine-item scale for country-of-origin image and all nine indicators are reverse-coded within the survey.

**TABLE 7**

**Scale Items – Country-of-Origin Image**

**Country Beliefs (3 items):**

1. Rich/poor.
2. High level of education/low level of education.
3. Technologically advanced/not technologically advanced.

**People Affect (3 items):**

4. Trustworthy/not trustworthy.
5. Hard working/not hard working.
6. Likeable/not likeable.

**Desired Interaction (3 items):**

7. We should/should not have closer ties with \_\_\_\_\_ (*foreign country*).
8. Ideal country/not ideal country.
9. Would/would not welcome more investment from \_\_\_\_\_ (*foreign country*).

**Consumer Ethnocentrism**

Consumer ethnocentrism is the sentiment that the purchase of foreign goods is unpatriotic, inappropriate or immoral due to its damaging effects to the domestic economy and the loss of domestic jobs it causes. Shimp and Sharma (1987) developed the CETSCALE to measure the consumer ethnocentrism construct in order to partially explain why consumers prefer domestic products over their foreign counterparts. The



CETSCALE was originally developed and tested with samples exclusively from the United States and has been cross-nationally validated in subsequent studies (e.g., Netemeyer, Durvasula and Lichtenstein 1991). The original scale consists of 17 items on seven-point Likert scales anchored by strongly disagree/strongly agree (Douglas and Nijssen 2003; Klein, Ettenson and Morris 1998; Netemeyer, Durvasula and Lichtenstein 1991; Shimp and Sharma 1987). With regards to the internal consistency of the CETSCALE, several researchers have confirmed and cross-validated the reliability of the scale since its inception by Shimp and Sharma (1987). Table 8 illustrates the 17-item scale for measure a respondent's degree of consumer ethnocentrism.

**TABLE 8**

**Scale Items – Consumer Ethnocentrism**

1. Only those products that are unavailable in the United States should be imported.
2. American products first, last, and foremost.
3. Purchasing foreign-made products is un-American.
4. It is not right to purchase foreign products, because it puts Americans out of jobs.
5. A real American should always buy American-made products.
6. We should purchase products manufactured in America instead of letting other countries get rich off us.
7. Americans should not buy foreign products, because this hurts American business and causes unemployment.
8. It may cost me in the long-run, but I prefer to support American products.
9. We should buy from foreign countries only those products that we cannot obtain within our own country.
10. American consumers who purchase products made in other countries are responsible for putting their fellow Americans out of work.

11. Buy American-made products. Keep America working.
12. It is always best to purchase American products.
13. There should be very little trading or purchasing of goods from other countries unless out of necessity.
14. Curbs should be put on all imports.
15. Foreigners should not be allowed to put their products on our markets.
16. Foreign products should be taxed heavily to reduce their entry into the U.S.
17. American people should always buy American-made products instead of imports.

### **Animosity**

Animosity refers to the consumer's antipathy towards a foreign country that is related to current or past military, political or economic events (Klein, Ettenson and Morris 1998). The authors developed an original scale of animosity that consisted of three dimensions. General animosity describes an overall dislike towards a foreign country and was measured by a single indicator. Economic animosity consisted of five indicators that address antagonism caused by the economic relationship between the consumer's domestic country and the foreign country. War animosity gauges consumer's disdain towards a country due to previous and/or ongoing military conflicts between the two nations and was measured by three items in the Klein, Ettenson and Morris' (1998) study of Chinese consumers' animosity towards the Japanese. They specifically developed the war animosity items using the Nanjing massacre of 1937 whereby the Japanese troops were responsible for the deaths of 300,000 Chinese civilians. The authors found that the Chinese consumers continue to harbor immense anger towards the

Japanese for this atrocity and many refuse to purchase Japanese products, despite their overall positive evaluation of these products.

Since its original conceptualization, the measurement of consumer animosity has varied across subsequent studies and is dependent upon the focus and nature of the study itself. Due to limitations from using 1992 National Election Study data, Klein and Ettenson (1999) measured economic-based animosity with a single proxy measure in their pursuit to establish discriminant validity between the animosity and consumer ethnocentrism constructs. Furthermore, Klein (2002) expanded the general animosity scale to three items while reducing the economic animosity scale from five to three items in an assessment of U.S. consumers' animosity towards Japan. The three war animosity items were modified to specifically address the bombing of the U.S. naval base of Pearl Harbor by the Japanese in 1941. While no reliability alphas were reported in the original Klein, Ettenson and Morris (1998) study, the alpha for each of the three animosity dimensions were greater than 0.78 for the Klein (2002) study.

Another departure from the original animosity scale is found within the research conducted by Nijssen and Douglas (2004), which investigated war and economic animosity towards Germany by the Netherlands, but omitted measures of general animosity. Kesic, Piri Rajh and Vlastic (2005) took the opposite approach by focusing solely on war-based animosity in their application of the animosity model in Croatia and its antipathy towards Bosnia, Serbia and Western Europe. Additionally Witkowski (2000) measured political and economic animosity harbored by the United States towards China due to current political disputes and unfair trading practices while omitting general and war animosities. In summary, specific dimensions of animosity that were evaluated

within each of these studies were chosen for their relevance with regards to the nature of the study and its objectives.

For the focus of this study, the animosity of U.S. consumers toward three Asian countries and its effect upon product perceptions and purchase intention are measured. To ensure comparability of the animosity measure across all three origin countries, its scale items must be standardized while maintaining relevancy for all three countries with regards to U.S. consumers. For this reason as well as the lack of recent war-related events between the U.S. and China, Japan or South Korea, the war-based dimension of animosity will not be measured in this study. In contrast, the relevance of economic-based animosity by U.S. consumers is strongly fueled by the current U.S. economic downturn and the falling value of the U.S. dollar, which results in higher prices for foreign products. Consequently all three of these Asian countries are active trading partners with the United States. Consumer anger also perpetuates from the proliferation of poor-quality, unsafe Chinese-made products entering the U.S. market over the past few years; therefore economic animosity is currently considered an important dimension for U.S. consumers and will be assessed using the five items from Klein, Ettenson and Morris (1998). To ascertain general animosity, the three-item scale developed by Klein (2002) will be utilized. Table 9 illustrates the eight-item scale to reflect a consumer's level of animosity towards a country. The third item (like the country) is the only indicator that is reverse-coded in this scale.

**TABLE 9**

**Scale Items – Animosity**

**General Animosity (3 items):**

1. I dislike the \_\_\_\_\_ (*foreign country*).
2. I feel angry towards \_\_\_\_\_ (*foreign country*).
3. I like the \_\_\_\_\_ (*foreign country*).

**Economic Animosity (5 items):**

4. \_\_\_\_\_ (*foreign country*) is not a reliable trading partner.
5. \_\_\_\_\_ (*foreign country*) wants to gain economic power over the United States.
6. \_\_\_\_\_ (*foreign country*) is taking advantage of the United States.
7. \_\_\_\_\_ (*foreign country*) has too much economic influence in the United States.
8. The \_\_\_\_\_ (*foreign country*) are doing business unfairly with the United States.

**Demographics**

In order to make ad hoc comparisons across U.S. consumer characteristics, an adequate sample of respondents will be chosen to provide equal representation across general demographic variables, including age, geographic residence, gender and ethnicity. Previous studies have found relationships between demographic variables and the constructs studied in this dissertation. For example, the Klein (2002) study found that U.S. men were more likely to harbor economic animosity towards Japan than U.S. women; however there were no gender differences with regards to consumer ethnocentrism or general animosity. The study also reported no age differences for economic animosity and consumer ethnocentrism, but a low correlation between age and war animosity was found, indicating that older consumers were more likely to harbor

higher levels of war-related animosity than younger consumers. This finding supports the afore-mentioned lack of recent war-related hostilities between the United States and the Asian countries investigated in this study, thus reducing the pertinence of war animosity among the majority of U.S. consumers.

Key factors will be measured to assess the socioeconomic status of the respondent, particularly her education, occupation, and income. Previous research has concluded that North American respondents with higher levels of education tend to exhibit more favorable attitudes toward foreign products than toward their domestic counterparts (Anderson and Cunningham 1972; Dornhoff, Tankersley and White 1974; Wall and Heslop 1986). Other authors also found evidence of an inverse relationship between both education and income with regards to consumer ethnocentrism (Sharma, Shimp and Shin 1995; Klein and Ettenson 1999). In contrast, income, occupational class and education were not predictive of animosity towards Japan by U.S. consumers (Klein 2002).

## **RESEARCH APPROACH**

Research methods are typically defined by the degree of control that the researcher has over what she is investigating and can be generalized as either experimental or non-experimental (Specter 1981). A researcher conducting an experiment has some level of direct control over the independent variables, but in non-experimental designs, the independent variables are either not manipulable or have already manifested themselves. Since consumers' beliefs and attitude formations are retroactive in nature, survey methodology is appropriate in assessing existing information from these

consumers. The primary drawbacks of questionnaires include potentially low response rates, the inability of researchers to probe and the lack of control over the timeliness of the survey administration process (Hair *et al.* 2010). Despite these criticisms, surveying has several advantages over other types of research designs. They can be adapted to meet the needs of practically any research environment and enables researchers to study large, geographically dispersed populations in a cost effective manner (Kumar 2000). Surveys can accommodate large sample sizes and have the ability to identify small differences across samples (Hair *et al.* 2010). Finally, surveys may be readily checked for the validity of the data (Graziano and Raulin 1989). Due to these justifications and the nature of the research problem, a survey test instrument is developed and utilized to collect data for the purposes of testing the structural soundness of the proposed model and the aforementioned hypotheses.

## **SAMPLE DESIGN**

This research investigates U.S. consumers' receptivity of foreign products from three Asian countries-of-origin. The study of multiple countries within a single research endeavor provides "external validity to the proposed model by showing that the findings for one country could be applied to another" (Laroche *et al.* 2005, p. 103). It is fitting to assess U.S. consumer's reactions to foreign products since the United States leads the world in importing with an estimated import value of nearly two trillion U.S. dollars for 2007 (CIA World Factbook 2008). To put this in perspective, the world's total import figure for 2006 was 13.81 trillion U.S. dollars and the next largest importer is the European Union with imports totaling 1.47 trillion U.S. dollars for 2005.

China, South Korea and Japan are selected as the product origin countries for two primary reasons. First, all three of these Asian nations were chosen for their current economic ties with the United States and are active exporters of products to the country. China constitutes 15.9% of all U.S. imports for 2006 and is only marginally surpassed by Canada, the U.S.'s largest import partner with 16% of the U.S. imports. Japan is also considered one of the main import partners of the United States and represents 7.9% of the imports entering the country. While Korea did not make the list of the top five U.S. import partners in the CIA World Factbook (2008), the country has played an important role as a major importer of consumer electronics, wireless telecommunications equipment, computers and automobiles to the U.S. market. In 2007, 12.5% of South Korea's 371.5 billion U.S. dollars worth of exports landed on U.S. shores for consumption.

The second reason for selecting these three Asian nations pertains to their varying levels of industrial development and economic strength. Japan has long been considered as one of the three major players in international trade, juxtaposed with the United States and Europe within a global interlinked economy (Ohmae 1999). Since its post-World War II era of restoration, the country has risen from an image as a producer of cheap, inferior products to becoming a world leader in technological advancements. Laroche *et al.* (2005) confirms that "Japan has strongly impacted the world economy and has presented a major challenge to the major economic superpowers by producing high quality products in areas such as automobiles and consumer electronics" (p. 103).

The Republic of South Korea has experienced record economic growth since the 1960's and enjoys strong relationships with its primary trading partners, Japan, China and



the United States (CIA World Factbook 2008). South Korea's export growth is a result of consistent improvements in the quality and technology of their products. Previously known for producing low-quality products during the 1980's, South Korea has since made considerable strides in quality control. It is expected that their consumer electronics and motor vehicles will soon rival the Japanese counterparts with regards to level of quality and available features, but currently cost significantly less for U.S. consumers and offer better guarantees against potential defects.

As an emerging industrial giant, China has undergone significant economic and political reforms during the last few decades. "China's economy during the last quarter century has changed from a centrally planned system that was largely closed to international trade to a more market-oriented economy that has a rapidly growing private sector and is a major player in the global economy" (CIA World Factbook 2008). The United States is the largest import partner of China, receiving 21% of all Chinese exports during 2006. In 2007, China's worldwide exports totaled 1.22 trillion U.S. dollars and included commodities (e.g., textiles machinery and equipment, oil and mineral fuels, plastics, LED screens, data processing equipment, optical and medical equipment, organic chemicals, steel, and copper) as well as consumer products (e.g., footwear, apparel, toys, electronics, and telecommunications equipment). Currently Chinese products are commonly viewed by U.S. consumers as inexpensive, lower-quality alternatives to similar products developed within more industrialized and technologically advanced countries.

The national variances in industrial and economic development among these three export countries are assumed to have an impact upon U.S. consumers' evaluation of their

country-product images. It is expected that consumers will have higher evaluations of both the country and its products for those nations in the latter stages of industrial and economic development. As noted in Chapter 2, previous research has commonly measured consumer perceptions and purchase intention towards all products from a particular country (e.g., Papadopoulos, Heslop and Bamossy 1990; Suh and Kwon 2002), generating an overall assessment of products from the country. In this study, Japan is assumed to produce the highest country-product images when compared to the Chinese and South Korean evaluations by U.S. respondents. Due its recent emergence as an industrial economy (when compared to the other two Asian countries), China is expected to exhibit the lowest country image evaluations from U.S. consumers. While these three countries are geographically situated near one another, they represent culturally distinct nations, expanding the scope of this study beyond the one- or two-country investigations commonly found in cross-cultural research.

## **QUESTIONNAIRE DESIGN**

To control for priming and order effects caused by the order of country presentation within the survey, the questionnaire will consist of deliberate changes in the order in which the three Asian countries are presented for each set of questions. The questionnaire has undergone minor modifications since its inception and the final version used for the main study is illustrated in Appendix C. The length of the questionnaire consists of 131 questions and the variables of interest will be sequentially measured in the following order: willingness to buy the product, product evaluation, attitude towards the product, country-of-origin image, animosity and consumer ethnocentrism. This sequence

is appropriate for reducing priming effects caused by first asking respondents about predictors that may increase the saliency and importance of these predictors and therefore exaggerate their influence on the outcomes (Klein 2002; Russell and Russell 2006). Basic demographic and socioeconomic variables will also be assessed at the end of the survey and will include the age, gender, country-of-citizenship, ethnicity, income and occupation of each respondent.

### **Questionnaire Pretest**

The questionnaire was subjected to pretesting with a relatively small sample of U.S. consumers that vary in key demographic variables such as age, income, occupation and gender. The convenience sample consisted of respondents from two sources, university students that are enrolled in marketing courses and participating adults from a clientele base of a local small business. While both sampling frames are considered as convenience samples, their combined diversity is somewhat representative of the general population of U.S. consumers. The questionnaire was administered in hardcopy form to a total of 138 respondents, of which 41 are students and 97 are non-student adults. A total of 35 questionnaires were omitted from the sample. 13 surveys were incomplete and 22 respondents were not U.S. citizens; therefore the final number of useable surveys totaled 103, of which only 28 are student respondents. The purpose of the pretest is to identify any issues with the questionnaire itself (e.g., survey readability and comprehension, question format and layout and order of constructs) and to initially evaluate construct reliability and validity. Issues arising from the results of the pretest will be addressed prior to data collection with the main sample.

The survey itself consisted of established scale items for each variable tested with the dependent variable items listed before the independent variable items to avoid potential priming and order effects. Respondents are asked to indicate their beliefs, attitudes and purchase intentions toward foreign products from the three countries of analysis, namely Japan, China and South Korea. Due to current events, these countries were chosen on the basis of generating differentiated degrees of national image and animosity from the U.S. respondents. For example, it is expected that U.S. consumers will have higher levels of animosity towards China than Japan or South Korea since many U.S. citizens are currently protesting the involvement of the Chinese government within Tibet and Darfur and have ridiculed recent Chinese business practices (e.g., exporting unsafe products, violating intellectual property rights, undervaluing its currency and dumping surplus goods into foreign markets). With regards to country-of-origin image, it is expected that Japan and South Korea will have more positive country images than China due to their higher level of technological advancement and economic development.

Based on the pretest responses, minor modifications were made to the questionnaire's design to aid in the readability and comprehension of the instructions. The questionnaire illustrated in Appendix C is the final result of these modifications. The following sequence of construct measures is presented in the survey in order to avoid demand artifacts through the assessment of dependent variables before independent variables; willingness to buy, attitude, evaluation, country-of-origin image, animosity and consumer ethnocentrism. The final questions on the survey consist of demographic variables and include age, state, income, occupation, citizenship, race and gender.

Respondents were also asked to comment on their perception of the survey's purpose prior to providing their demographic information. For all constructs of interest except for consumer ethnocentrism, the U.S. respondents answered questions pertaining to the three Asian countries of interest. In addition to changing the countries' order of presentation throughout the survey to reduce priming and order effects, several scale items were reverse-coded and required additional cognitive awareness by the respondents.

Preliminary results from the pretest suggest acceptable levels of construct reliability and these results were not used in the empirical analysis of the main study. Table 10 illustrates the internal consistency of the constructs with regards to U.S. consumers and their opinions towards the three Asian countries of interest in this study. The Cronbach's alpha, a common measure of construct reliability for multi-item scales (Nunnally 1978), is reported as acceptable for each scale (i.e., the coefficient alpha is greater than 0.70).

**TABLE 10****Internal Consistency Reliabilities – Pretest**

<b>Scale</b>	<b>Cronbach's Alpha</b>	<b>Standardized Item Alpha</b>
<b>Willingness to Buy</b>		
Japanese products	0.83	0.85
South Korean products	0.90	0.90
Chinese products	0.87	0.87
<b>Attitude</b>		
Japanese products	0.98	0.98
South Korean products	0.97	0.97
Chinese products	0.98	0.98
<b>Evaluation</b>		
Japanese products	0.87	0.88
South Korean products	0.90	0.91
Chinese products	0.89	0.89
<b>Country-of-Origin Image</b>		
Japan	0.84	0.84
South Korea	0.87	0.87
China	0.84	0.84
<b>Animosity</b>		
Japan	0.81	0.82
South Korea	0.86	0.86
China	0.88	0.88
<b>Consumer Ethnocentrism</b>		
United States	0.96	0.96

A preliminary structural equation modeling analysis was conducted to provide additional pretest assessments. The measurement model for the Japanese products was tested by confirmatory factor analysis with the AMOS software package and was found to be both identified and recursive. The model contained 113 parameters to be estimated, a chi-square value of 2298.962 and 1112 degrees of freedom. The validity of the constructs and their relationships were assessed and were acceptable with no deviations from previous research findings within marketing theory that relate to these constructs.

Due to these positive results from the analysis of the pretest, the survey instrument was found adequate for implementation in the main study.

### **Survey Administration**

Data will be collected through a U.S. market research firm that selects respondents from a nationwide consumer panel. The market research firm will be instructed to compile a sample of U.S. respondents with equal representation across key segmentation variables including gender, age, income, occupation and geographic residence. The survey will be conducted via an online web site and the research firm will provide the respondents with accessibility to the site for a predetermined period of time. The online survey will allow participants to answer the questions in the order in which they are presented without the possibility of returning to questions listed on previous web pages. This function eliminates the respondent's potential to deviate from answering questions in the order desired by the researcher. After completing the survey, the respondents will be monetarily rewarded by the market research firm for their participation.

The minimum sample size required for statistical analysis through structural equation modeling is based on the ratio of subjects to free model parameters. According to Kline (1998), "results of some computer simulations studies of CFA models indicate that problems like Heywood cases or non-convergence of iterative estimation are more likely to occur for models with only two indicators per factor and sample sizes of less than 100-150 cases" (p. 211). The author further recommends a minimum ratio of ten subjects to one free model parameter for confirmatory factor analysis with preference towards a 20:1 ratio. A preliminary inspection of the proposed structural model for this

study reveals a total of 56 unspecified parameters; therefore the minimum sample size needed is 560 respondents. To provide optimal conditions for SEM analysis, the preferred sample size would amount to 1120 respondents (20 cases per unspecified parameter); therefore a sample size consisting of 800 to 900 respondents will be sought to ensure sample adequacy.

## **STATISTICAL ANALYSIS**

To fully understand the influences that each antecedent has on subsequent outcomes in the proposed model (i.e., the stages of consumer perceptions and purchase intention of a foreign product), structural equation modeling (SEM) will be utilized as the analytical technique of choice. Given the complexity of the relationships between COO and an increasing number of variables, holistic modeling is required to gain a better understanding of these relationships. “Unfortunately, to date and on the whole, very little structural modeling has been applied to the COO paradigm and never in a holistic manner” (Pharr 2005, p. 42). SEM allows a researcher to subject the data to a variety of tests, specifically confirmatory factor analysis to test the integrity of construct measures, path analysis to test the structural integrity of the model and multigroup analysis to test moderating effects (Kline 1998). SEM is considered a powerful tool for statistical analysis and has certain key advantages over other multivariate techniques. For example, SEM has the capacity to simultaneously test multiple relationships between various independent and dependent variables in a single pass, whereas in regression and analysis of variance (ANOVA), separate analyses must be conducted for each dependent variable. While regression models implicitly assume zero measurement error, error terms are



explicitly modeled in SEM and as a result, path coefficients modeled in SEM are unbiased by error terms, but regression coefficients are not. Additionally SEM can examine relationships among both latent and observed variables for both linear and curvilinear effects, including interactions. In contrast, all variables in regression and ANOVA must be observed. Table 11 serves as a summary illustration of the hypotheses and the proposed statistical analyses for the main study.

**TABLE 11**

**Hypotheses and Proposed Statistical Analyses**

**I. Five main effects hypotheses:** test the statistical significance of parameters using Maximum Likelihood Estimation.

**H<sub>1a</sub>:** The consumer's evaluation of the foreign product positively influences the consumer's attitude towards the foreign product.

**H<sub>1b</sub>:** The consumer's evaluation of the foreign product positively influences the consumer's willingness to buy the foreign product.

**H<sub>1c</sub>:** The consumer's attitude towards the foreign product positively influences the consumer's willingness to buy the foreign product.

**H<sub>2a</sub>:** Country-of-origin image positively influences the overall evaluation of the foreign product by the consumer.

**H<sub>2b</sub>:** Country-of-origin image positively influences consumer attitude towards the foreign product.

**II. Five interaction effects hypotheses for CET as a moderating variable:** compare standardized estimates across conditions of the moderator using multigroup SEM analysis.

**H<sub>3a</sub>:** As consumer ethnocentrism increases, the magnitude of the effect of country-of-origin image on the consumer's evaluation of the foreign product increases.

**H<sub>3b</sub>:** As consumer ethnocentrism increases, the magnitude of the effect of country-of-origin image upon the consumer's attitude towards the foreign product increases.

**H<sub>3c</sub>:** As consumer ethnocentrism increases, the magnitude of the effect of consumer's evaluation of the foreign product on her attitude towards the foreign product increases.

**H<sub>3d</sub>:** As consumer ethnocentrism increases, the magnitude of the effect of consumer's evaluation of the foreign product on her willingness to buy the product increases.

**H<sub>3e</sub>:** As consumer ethnocentrism increases, the magnitude of the effect of consumer's attitude towards the foreign product on her willingness to buy the product increases.

**III. Five interaction effects hypotheses for animosity as a moderating variable:** compare standardized estimates across conditions of the moderator using multigroup SEM analysis.

**H<sub>4a</sub>:** As animosity increases, the magnitude of the effect of country-of-origin image on the consumer's evaluation of the foreign product increases.

**H<sub>4b</sub>:** As animosity increases, the magnitude of the effect of country-of-origin image upon the consumer's attitude towards the foreign product increases.

**H<sub>4c</sub>:** As animosity increases, the magnitude of the effect of consumer's evaluation of the foreign product on her attitude towards the foreign product increases.

**H<sub>4d</sub>:** As animosity increases, the magnitude of the consumer's evaluation of the foreign product on her willingness to buy the product increases.

**H<sub>4e</sub>:** As animosity increases, the magnitude of the effect of consumer's attitude towards the foreign product on her willingness to buy the product increases.

### **Measurement Reliability**

The internal consistency of the measures included in this dissertation must be examined prior to the SEM analyses. Since all of the constructs consist of multiple item scales, a coefficient alpha can be computed for each variable to ascertain its internal consistency. According to Nunnally (1978), a coefficient alpha with a value greater than 0.70 represents a good indication of internal consistency. Additionally inter-item correlations and item-to-total correlations will be assessed to further validate the reliability of the constructs. It should be noted that the measures used in this dissertation have exhibited reliabilities in previous studies that are considered acceptable for basic

research; however construct reliability will be examined in this study to validate and further support these claims.

### **Confirmatory Factor Analysis**

For the first stage of a two-step SEM approach (Anderson and Gerbing 1988), a confirmatory factor analysis will be conducted to assure that the items measured within this study are loading on both the proper variables as well as the expected dimensions within each variable. “Because (a) the structural portion of a full structural equation model involves relations among only latent variables, and (b) the primary concern in working with a full model is to assess the extent to which these relations are valid, it is critical that the measurement of each latent variable is psychometrically sound” (Byrne 2001, p. 145). Weak loadings and cross-loadings are evaluated individually for potential deletion and a testable structural model is the desired result of this analysis.

Confirmatory factor analysis assesses the relationship between the latent variables and the indicators within the measurement model. By evaluating the measures against one another, both convergent validity and discriminant validity is assessed. According to Kline (1998), “a set of indicators presumed to measure the same construct shows convergent validity if their intercorrelations are at least moderate in magnitude. If the estimated correlations of the factors that underlie sets of indicators that are supposed to measure different constructs are not excessively high, then there is evidence for discriminant validity” (p.197-198). These assessments, in addition to confirming face validity and nomological validity with existing theory from previous research, are important in establishing the overall validity of the constructs presented in the model.

## **Structural Analysis**

The second stage of structural equation modeling allows for simultaneous regression analyses for all of the proposed paths within the structural model (Anderson and Gerbing 1988). The validated measurement model is converted into a structural model by changing the covariance paths between variables to directional paths to represent cause and effect relationships. From the estimation, the amount of explained variance for each construct within the model is indicated by its squared multiple correlation value. This stage of structural equation modeling will allow for strength comparisons of the proposed direct effects within the model, which indicates which stage (i.e., consumer evaluation, attitude or willingness to buy) is most influenced by each antecedent tested. Goodness-of-fit statistics are also evaluated to determine the overall fit of the model and theory-driven modifications are considered to improve model fit.

## **Multigroup Analysis**

After an acceptable structural model of main effects has been determined, the hypothesized moderating effects can be tested by dividing the entire sample into sample groups that vary by levels of the moderating variables, namely consumer ethnocentrism and animosity. A multigroup analysis is conducted to assess and compare the model's goodness of fit for each group and will be used to test the significance of each interaction separately from all other interactions. This procedure requires splitting the sample into groups based on their responses to measures of consumer ethnocentrism and animosity. For example, Klein (2002) divided the subjects into two groups based on their animosity scores. Respondents scoring below a four on a seven-point Likert scale were segmented as the "low animosity" group while those scoring above a four were part of the "high

animosity” group. This analysis will be conducted for each of the ten hypothesized interactions and differences in model fit will indicate a significant influence of the moderating variable.

### **Analysis Issues**

It is important to note a few challenges that may arise from empirically testing the proposed model. First, structural equation modeling requires a large sample size that is dependent upon the number of variables within the structural model being tested. According to Kline (1998), a sample size of 100-200 respondents is considered a medium-sized sample, but a larger sample is suitable for more complex models. An additional issue arises with the testing of very large samples. While a large sample size reduces the chances of falsely rejecting or accepting a hypothesis (Stevens 1996), small effects sizes may become statistically significant on the sole basis of having such a large sample size.

Secondly, since previous studies typically assessed influences upon one or two stages of consumer perception and purchase of foreign products, multicollinearity is likely to become an issue within a model with an extensive number of influences being evaluated. To some extent, the confirmatory factor analysis conducted at the first stage of structural equation modeling will alleviate this problem. Special care was also taken to select measurement scales for each construct that are dissimilar from the other constructs to reduce the risk of redundancy among the construct measures.

## **CHAPTER 4: RESULTS OF THE STUDY**

### **INTRODUCTION**

The purpose of this chapter is to examine the methods used for data collection and statistical analysis within this study. An overview of the data collection process and sample profiles are discussed initially and construct reliability is determined for all of the scales. The measurement model is assessed with confirmatory factor analysis and the convergent and discriminant validities of the constructs are addressed. Path analysis is used to test the five posited main effects and multigroup analysis is conducted to evaluate the ten potential interaction effects. Evidence of significant demographic variations is discussed and the results of the formal testing of the 15 research hypotheses are provided.

### **DATA COLLECTION AND SAMPLE PROFILE**

A total of 800 surveys were collected by a professional marketing research firm that distributed the questionnaires among members of their U.S. consumer panel. The firm was provided general guidelines by the researcher to select respondents that were of U.S. citizenry and produce a sample that was diverse in terms of gender, age, ethnicity, residential area and occupation. Table 12 summarizes the characteristics of the sample based on the afore-mentioned parameters as well as the social classes represented within the sample.

TABLE 12

## Sample Characteristics

Characteristic	Freq.	%	Characteristic	Freq.	%
<b>Gender</b>			<b>U.S. Region</b>		
Male	386	48.3	North-Atlantic	128	16.0
Female	414	51.8	Mid-Atlantic	99	12.4
<b>Age</b>			South-Atlantic	104	13.0
18-24	253	31.6	North-Central	80	10.0
25-34	201	25.1	Central	77	9.6
35-44	109	13.6	South-Central	96	12.0
45-54	145	18.1	North-Pacific	43	5.4
55-64	69	8.6	Mid-Pacific	67	8.4
65+	23	2.9	South-Pacific	97	12.1
Average Age*	36	-	AK, HI & Territories	9	1.1
<b>Ethnicity</b>			<b>Income</b>		
Caucasian	573	71.6	< \$16,000	118	14.6
African American	131	16.4	\$16,000-\$29,999	146	18.3
Asian	34	4.3	\$30,000-\$74,999	264	33.0
Hispanic	22	2.8	\$75,000-\$149,999	87	10.9
Other/Mixed	30	3.8	\$150,000+	12	1.5
No Response	10	1.3	No Response	173	21.6
<b>Occupation</b>			<b>Social class</b>		
Student	63	7.9	Lower	160	20.0
Unemployed	11	1.4	Working	191	23.9
Part-time/Low-wage	138	17.3	Lower Middle	345	43.1
Blue Collar	101	12.6	Upper Middle	93	11.6
White Collar	335	41.9	Upper	11	1.4
Service/Government	102	12.8			
Retired	29	3.6			
No Response	21	2.6			

\* Age was collected as a continuous variable and categorized for reporting purposes.

While most of the demographic variables were directly answered by each respondent, social class was determined by the researcher and is based on a combination of the income and occupation variables. The study employed the typology of social classes as defined by Thompson and Hickey (2005). These authors developed a five-class model to delineate the social classes within the United States. As with most social class systems, the upper class resides at the top of the social hierarchy and consists of

individuals with incomes exceeding \$150,000. These societal elitists hold prominent governmental and business positions and wield enormous political and economic power within the United States. The middle class is divided into two castes, the upper middle class and the lower middle class. The upper middle class contain those individuals with advanced post-secondary education and work as physicians, professors, attorneys and high-level white collar positions. While these people generally earn from \$75,000 to nearly \$150,000 annually, the salaries of lower middle class individuals typically range from \$30,000 to nearly \$75,000. Workers in this group are mostly white collar employees holding positions such as school teachers, sales agents, and low- to mid-level managers. The working class, consisting of both entry level white collar workers, blue collar workers and clergymen, earn from \$16,000 to nearly \$30,000 in annual wages. Finally, the lower class consist of those individuals earning less than \$16,000 and are unemployed or employed in minimum wage jobs or part-time work.

In terms of the representativeness of the sample, the firm did an adequate job of collecting data from a diverse group of U.S. consumers with sufficient demographic variability. The number of male to female respondents was almost an even split, with females slightly outnumbering the males by approximately 3%. Age was not evenly dispersed among the respondents and was skewed more heavily towards younger respondents (i.e., those respondents that are less than 40 years old) than older ones. The ethnicity of the U.S. consumers is heavily skewed towards Caucasians and African Americans while other racial minorities are under-represented in the sample. The respondents indicated their state of residency in the surveys, which were consolidated into primary regions of the United States. All of the regions are represented in the



sample, but a disproportionate percentage of these respondents reside in the northeastern United States. These results are highly indicative of the normal population spread across the country and illustrate the high concentration of residents in the North Atlantic region in relation to the population of other U.S. regions. The respondent's income and occupation were used to determine her social class status on the Thompson and Hickey Five Class Model (Thompson and Hickey 2005). It is interesting to note that the percentages of respondents in each social class adequately resemble the Thompson and Hickey's breakdown of social class membership within the United States. The authors state that the lower class consists of approximately 17% and the working class comprises 30% of the U.S. population. The lower middle and upper middle classes make up 33% and 15% respectively, while the upper class consists of a mere 5% of the total population. In this study, the sample is comprised of the following percentages for each social class: 20% lower class, 23.9% working class, 43.1% lower middle class, 11.6% upper middle class and 1.4% upper class.

### **Demographic Assessment**

It is important to study demographic variables and their relationships with the constructs under investigation in this dissertation. The effects of demographic characteristics (e.g., age, gender, social status and ethnicity) are generalizable across specific consumer segments and have implications for actionable marketing strategies (Sharma, Shimp and Shin 1995). For the purpose of this study, key demographic variables will be assessed to determine potential correlations with consumer ethnocentrism and animosity, the two variables that are posited as moderators influencing the relationships between variables in the proposed structural model. Differences in

means will also be assessed to determine if there are variations in the U.S. consumers' perceptions of the three Asian countries that are based on the demographic characteristics of the sample.

Previous research has suggested that older U.S. consumers are generally more conservative and patriotic (Han 1988); therefore they prefer domestic products over imports and feel that they keep their fellow citizens employed by purchasing products made by them. Younger generations are more globally open than their predecessors and are may be more inclined to purchase imports than the older generations (Bannister and Saunders 1978). In contrast, other studies have provided conflicting results that indicate a preference for foreign goods by older consumers (Schooler 1971). In this study, the correlation between the respondent's age and their level of CET are significant at the 0.01 level, but with a Pearson's  $r$  value of 0.135, this relationship is considered weak. This evidence suggests that the U.S. consumer's age is not primarily indicative of their level of CET and that other variables should be investigated to help understand the complexities of consumer ethnocentrism.

As for the possible correlation between age and animosity towards a foreign country, previous research suggests a positive relationship between the two variables. Older generations have experienced more military, economic and social conflicts with other countries than successive ones (Sharma, Shimp and Shin 1995) and as a result, may harbor more animosity than the members of the younger generations. This study does support the proposition that age is significantly and positively correlated to animosity towards a country at the 0.05 level. Unfortunately, the correlation coefficients were weak across all three countries (0.076 for Japan, 0.112 for South Korea and 0.129 for China),

indicating that age alone does not sufficiently explain a person's degree of animosity towards a country.

Gender is another demographic variable that is commonly postulated to correlate with CET and international animosity. According to Sharma, Shimp and Shin (1995), "females are more conservative, more conformist (Eagly 1978), more patriotic (Han 1988), more concerned about preserving social harmony and promoting positive feelings among group members, and less individualistic (Triandis *et al.* 1985)" (p. 29). This suggests that women are more likely to exhibit higher levels of CET than men. Since gender consists of categorical data, Spearman's  $\rho$  was calculated as the correlation coefficient instead of Pearson's  $r$ . A correlation coefficient value of 0.105 was produced from the correlation analysis and is significant at the 0.01 level. The data set was divided into two subsets based on gender and the means for CET were compared. The CET mean value of 3.88 for females ( $N = 414$ ) was greater than the mean value for males ( $N = 386$ ), which was valued at 3.56 on a scale of one to seven. The data from this study suggests that, although women are more ethnocentric than men, gender alone does not sufficiently explain the level of CET within a person.

As for animosity, similar analyses were conducted to determine its relationship with gender. When compared to CET, consumer animosity research has had a much shorter lifespan and is still in its infancy with regards to scale development and theory building. While attempting to substantiate the differentiation between the CET and animosity constructs, Klein (2002) found that U.S. men harbored more animosity towards Japan than U.S. women, particularly on scale items pertaining to economic-based animosity. The correlation analysis demonstrated insignificant Spearman's  $\rho$  values for

the Japanese and South Korean assessments, but the Chinese assessment produced a correlation value of -0.081, which is significant at the 0.05 level. To further investigate the relationship between gender and animosity, a comparison of means suggests that males (mean of 4.03 on a 1 to 7 scale) harbor slightly less animosity towards China than females from the data set (mean of 4.27).

Due to the unequal representation of both the geographic residence and ethnicity of the sample, neither of these two demographic variables was assessed within the correlation analyses. Some respondents were sensitive about revealing their race, income or occupation and chose not to respond to these questions, resulting in missing data. Fortunately, enough information was provided to categorize all respondents into a social class that can be used for meaningful correlational comparisons. Previous research has provided support for the negative relationship between social class and consumer ethnocentrism. It appears that members of lower social classes tend to have higher levels of CET than their more affluent counterparts. Specifically, blue-collar and working class individuals have been shown to exhibit more consumer ethnocentric tendencies than white-collar and middle class individuals (Han 1988; Klein and Ettenson 1999). This study uses the five-class model of social classes by Thompson and Hickey (2005), which delineates the social classes within the United States into lower class, working class, lower middle class, upper middle class and upper class. The correlation analysis of CET and social class in this study resulted in an insignificant correlation coefficient value of 0.005, suggesting that there is no correlation between the two variables.

The relationship between social class and animosity has not been heavily investigated by previous research and individual components of social class (e.g.,

education level, income and occupation) have not been shown to be predictive of animosity towards other countries. As expected, the correlation assessment conducted in this study reveals insignificant correlation coefficients valued at 0.017, 0.011 and 0.068 for Japan, South Korea and China, respectively.

## **DATA PREPARATION**

### **Data Screening**

Several data screening issues must be addressed in order to adequately prepare the data set for accurate statistical analysis (Kline 1998). Initially, the researcher must examine the data for input accuracy and determine the best method for addressing missing observations. After close examination of the means, standard deviations and frequency distributions, it was determined that eight data values were invalid entries and were corrected by reviewing the respondents' original surveys. Missing data values were only evident among a few of the demographic variables in the data set and will not adversely affect the main data analysis. Furthermore, the missing values have already been addressed in the demographic assessment section of the dissertation.

### **Multicollinearity**

The next issue that needs careful consideration during the data screening process is multicollinearity, defined as the condition in which "intercorrelations among some variables are so high that certain mathematical operations are either impossible or the results are unstable because some denominators are close to zero" (Kline 1998, p.77). Squared multiple correlations were closely examined to identify any evidence of multicollinearity among the variables within this study. The squared multiple correlation

estimate is identical to the  $R^2$  coefficient found within a regression equation and is computed as  $SMC = 1 - (\text{Error Variance} / \text{Indicator Variance})$ . Table 13 illustrates the squared multiple correlations between each variable and the rest of the variables in the model. Since all of the SMC values do not exceed the cut-off point of 0.90 (Kline 1998), these results provide empirical evidence to support the lack of multicollinearity among the variables.

**TABLE 13**  
**Squared Multiple Correlations**

<b>WTB</b>	<b>Japan</b>	<b>S. Korea</b>	<b>China</b>	<b>ANI</b>	<b>Japan</b>	<b>S. Korea</b>	<b>China</b>
wtb1	0.22	0.16	0.26	ani1	0.45	0.51	0.48
wtb2_rc	0.44	0.50	0.48	ani2	0.30	0.42	0.38
wtb3_rc	0.57	0.64	0.58	ani3	0.35	0.34	0.42
wtb4_rc	0.67	0.75	0.69	ani4	0.56	0.56	0.62
wtb5_rc	0.67	0.73	0.71	ani5	0.35	0.36	0.41
wtb6_rc	0.21	0.25	0.27	ani6	0.47	0.56	0.57
<b>ATT</b>	<b>Japan</b>	<b>S. Korea</b>	<b>China</b>	ani7	0.45	0.52	0.52
att1	0.90	0.85	0.90	ani8_rc	0.27	0.35	0.40
att2	0.88	0.84	0.89	<b>CET</b>	<b>U.S.A.</b>		
att3	0.87	0.83	0.88				
<b>EVAL</b>	<b>Japan</b>	<b>S. Korea</b>	<b>China</b>				
eval	0.55	0.51	0.51				
eva2_rc	0.33	0.31	0.34				
eva3	0.35	0.39	0.32				
eva4	0.56	0.58	0.49				
eva5	0.67	0.66	0.62				
eva6	0.53	0.50	0.41				
<b>COO</b>	<b>Japan</b>	<b>S. Korea</b>	<b>China</b>				
coo1_rc	0.52	0.48	0.36				
coo2_rc	0.78	0.65	0.57				
coo3_rc	0.77	0.65	0.54				
coo4_rc	0.63	0.55	0.57				
coo5_rc	0.56	0.47	0.37				
coo6_rc	0.65	0.62	0.62				
coo7_rc	0.62	0.67	0.54				
coo8_rc	0.57	0.59	0.51				
coo9_rc	0.54	0.70	0.61				

To confirm the lack of multicollinearity among the variables, a second technique was employed to assess the correlation among the variables in this study. A composite

variable was created within the SPSS program for each construct and five variables (attitude, evaluation, country-of-origin image, animosity and consumer ethnocentrism) were regressed upon the outcome variable, willingness to buy. Collinearity statistics were computed to provide the tolerance and variance inflation factor (VIF) scores for each of the five variables and these scores are provided in Table 14.

**TABLE 14**  
**Collinearity Statistics**

<b>Variable</b>	<b>Japan Model</b>		<b>South Korea Model</b>		<b>China Model</b>	
	<b>Tolerance</b>	<b>VIF</b>	<b>Tolerance</b>	<b>VIF</b>	<b>Tolerance</b>	<b>VIF</b>
ATT	0.428	2.336	0.506	1.975	0.455	2.198
EVAL	0.449	2.228	0.501	1.996	0.466	2.145
COO	0.654	1.528	0.593	1.685	0.673	1.485
ANI	0.633	1.580	0.574	1.741	0.578	1.729
CET	0.679	1.472	0.697	1.434	0.783	1.277

Dependent variable: WTB

Tolerance refers to “the amount of variability of the selected independent variable not explained by the other independent variables” (Hair *et al.* 2010, p. 201) and is computed as 1.0 minus the SMC between a variable and the rest of the variables. According to Kline (1998), tolerance scores that are less than 10% indicates potential issues with multicollinearity. The findings in Table 14 illustrate no violations of this tolerance test and suggest the lack of multicollinearity among these variables.

The VIF assessment is another test of multicollinearity that measures how much the variance of the estimated coefficients is increased over the case of no correlation among the independent variables. It is computed as:

$$VIF = \frac{1}{1 - R^2}$$

where  $R$  is the correlation coefficient. If no two independent variables are correlated, then each of the VIF values will be 1.0. If the VIF value is greater than 10.0, this indicates that the variable may be redundant with other variables within the model (Myers 1990). All of the VIF values reported in Table 14 are well below the cut-off value of 10.0 and provides further support of the lack of multicollinearity.

### **Outliers**

Outlying observations are unusual data values that can result from data entry errors or rare events affecting the observation or experimentation during data collection. While outliers can occur by chance within a distribution, they may indicate either potential measurement error or a population consisting of a heavy-tailed distribution (Hair *et al.* 1992). The first corrective procedure to identify and resolve outliers is to examine the data set itself for inaccurate values. Upon close inspection of the frequency tables, eight data scores were discovered as invalid entries and corrected by the researcher.

Another common assessment of potential outliers is the Mahalanobis Distance measure ( $D^2$ ), which considers the position of each observation in relation to the centroid or center of all observations for a variable set (Hair *et al.* 2010). These authors recommend that cases with values of  $D^2/df$  (the Mahalanobis Distance measure divided by the degrees of freedom) exceeding 2.50 should be re-evaluated as potential outliers within the sample set. Table 15 illustrates the largest  $D^2$  value computed by the AMOS software as well as the degrees of freedom for each country model. From the AMOS output, the  $D^2/df$  value was computed for each model. All three values fell well below the



prescribed cut-off point of 2.50, thus providing evidence to support the absence of outliers for all three country models.

**TABLE 15**  
**Test for Outliers**

<b>Mahalanobis Distance Measures</b>				
<b>Model</b>	<b>Case No.</b>	<b>Largest <math>D^2</math> per Model</b>	<b><math>df</math></b>	<b><math>D^2/df</math></b>
Japan	601	190.389	1112	0.171
South Korea	32	187.263	1112	0.168
China	658	208.798	1112	0.188

## **CONSTRUCT RELIABILITY**

The next step of the data analysis process involves the examination of the reliability of the study's variables, which is defined as the level of consistency between the measurable items of a variable's scale. Three common methods were used in this study to evaluate the internal consistency of the six multi-item scales; the inter-item correlation analysis, the item-to-total correlation analysis and Cronbach's alpha coefficient of reliability.

### **Inter-Item Correlations**

The first method of construct reliability assessment addresses the measures relating to each separate item of the scale. Researchers commonly assess the inter-item correlation among the scale items when examining scale reliability. According to Robinson, Shaver and Wrightsman (1991), inter-item correlations should exceed 0.30 in order to provide evidence that the scale items are highly interrelated, hence are drawn from the same domain of a single construct. All six scales were analyzed across the three

country models with the exception of consumer ethnocentrism, which was evaluated once to determine inter-item reliability. Appendix D provides the complete list of inter-item correlation matrices for all six variables in the study. Four of the six constructs have evidence of low inter-item correlation scores within the matrices. Tables 16 through 18 report the inter-item correlations of the scale items for the construct, willingness to buy across all three country models.

**TABLE 16**

**Inter-Item Correlation Matrix – Willingness to Buy (Japan)**

	wtb1j	wtb2j_rc	wtb3j_rc	wtb4j_rc	wtb5j_rc	wtb6j_rc
wtb1j	1.000					
wtb2j_rc	.365*	1.000				
wtb3j_rc	.400*	.580*	1.000			
wtb4j_rc	.419*	.607*	.691*	1.000		
wtb5j_rc	.431*	.605*	.696*	.774*	1.000	
wtb6j_rc	.223	.329*	.345*	.421*	.428*	1.000

\* Inter-item correlation values > 0.30.

**TABLE 17**

**Inter-Item Correlation Matrix – Willingness to Buy (South Korea)**

	wtb1s	wtb2s_rc	wtb3s_rc	wtb4s_rc	wtb5s_rc	wtb6s_rc
wtb1s	1.000					
wtb2s_rc	.270	1.000				
wtb3s_rc	.314*	.629*	1.000			
wtb4s_rc	.387*	.663*	.762*	1.000		
wtb5s_rc	.370*	.660*	.754*	.821*	1.000	
wtb6s_rc	.214	.358*	.379*	.479*	.474*	1.000

\* Inter-item correlation values > 0.30.

**TABLE 18****Inter-Item Correlation Matrix – Willingness to Buy (China)**

	wtb1c	wtb2c_rc	wtb3c_rc	wtb4c_rc	wtb5c_rc	wtb6c_rc
wtb1c	1.000					
wtb2c_rc	.392*	1.000				
wtb3c_rc	.335*	.602*	1.000			
wtb4c_rc	.467*	.614*	.705*	1.000		
wtb5c_rc	.466*	.651*	.704*	.793*	1.000	
wtb6c_rc	.319*	.378*	.401*	.482*	.491*	1.000

\* Inter-item correlation values > 0.30.

The scale item *wtb2* is a reverse-coded indicator that measures the respondent's guilt level towards buying a product from the specific country. It displays a low inter-item correlation with only one other indicator, *wtb1* (the respondent's preference to buy products from the specific country) within the South Korea model, but has an acceptable level of correlation with item *wtb1* across the other two country models. One other scale item, *wtb6* (respondent's willingness to pay 10% more for the domestic product) exhibits evidence of low inter-item correlation with item *wtb1* for both South Korean and Chinese products.

Tables 19 through 21 illustrate the inter-item correlation matrices for the U.S. consumer's evaluation of products from Japan, South Korea and China, respectively.

**TABLE 19****Inter-Item Correlation Matrix – Evaluation (Japan)**

	evalj	eva2j_rc	eva3j	eva4j	eva5j	eva6j
evalj	1.000					
eva2j_rc	.554*	1.000				
eva3j	.474*	.289	1.000			
eva4j	.565*	.387*	.533*	1.000		
eva5j	.661*	.484*	.426*	.691*	1.000	
eva6j	.522*	.359*	.467*	.579*	.696*	1.000

\* Inter-item correlation values &gt; 0.30.

**TABLE 20****Inter-Item Correlation Matrix – Evaluation (South Korea)**

	evals	eva2s_rc	eva3s	eva4s	eva5s	eva6s
evals	1.000					
eva2s_rc	.511*	1.000				
eva3s	.487*	.303*	1.000			
eva4s	.579*	.448*	.574*	1.000		
eva5s	.650*	.484*	.542*	.699*	1.000	
eva6s	.523*	.373*	.473*	.593*	.679*	1.000

\* Inter-item correlation values &gt; 0.30.

**TABLE 21****Inter-Item Correlation Matrix – Evaluation (China)**

	evalc	eva2c_rc	eva3c	eva4c	eva5c	eva6c
evalc	1.000					
eva2c_rc	.531*	1.000				
eva3c	.418*	.259	1.000			
eva4c	.498*	.414*	.514*	1.000		
eva5c	.656*	.517*	.447*	.646*	1.000	
eva6c	.508*	.394*	.421*	.474*	.606*	1.000

\* Inter-item correlation values &gt; 0.30.

As with the willingness to buy construct, the matrices for product evaluation provide strong evidence of inter-item correlations across all scale items with only one exception. In both the Japanese and the Chinese models, the reverse-coded item *eva2* (products from the specific country is of lower quality than the same product from other countries) displayed low inter-item correlation with item *eva3* (products from the specific country have clever designs and colors).

While these two multi-item variables illustrate strong correlations among the items within their scale, two other constructs (country-of-origin image and animosity) exhibit problematic inter-item correlation scores. Tables 22 through 24 illustrate the inter-item correlation matrices for the country-of-origin image variable. All of the nine items of this scale are reverse-coded in the survey.

**TABLE 22**

**Inter-Item Correlation Matrix – COO Image (Japan)**

	coo1j_rc	coo2j_rc	coo3j_rc	coo4j_rc	coo5j_rc	coo6j_rc	coo7j_rc	coo8j_rc	coo9j_rc
coo1j_rc	1.000								
coo2j_rc	.707*	1.000							
coo3j_rc	.676*	.866*	1.000						
coo4j_rc	.298	.350*	.376*	1.000					
coo5j_rc	.320*	.433*	.437*	.654*	1.000				
coo6j_rc	.288	.392*	.386*	.762*	.689*	1.000			
coo7j_rc	.298	.323*	.329*	.374*	.332*	.365*	1.000		
coo8j_rc	.269	.261	.252	.391*	.244	.364*	.700*	1.000	
coo9j_rc	.226	.237	.246	.284	.186	.268	.697*	.646*	1.000

\* Inter-item correlation values > 0.30.

**TABLE 23****Inter-Item Correlation Matrix – COO Image (South Korea)**

	coo1s_rc	coo2s_rc	coo3s_rc	coo4s_rc	coo5s_rc	coo6s_rc	coo7s_rc	coo8s_rc	coo9s_rc
coo1s_rc	1.000								
coo2s_rc	.604*	1.000							
coo3s_rc	.621*	.781*	1.000						
coo4s_rc	.289	.294	.314*	1.000					
coo5s_rc	.097	.267	.229	.541*	1.000				
coo6s_rc	.195	.310*	.306*	.703*	.658*	1.000			
coo7s_rc	.341*	.340*	.359*	.464*	.336*	.453*	1.000		
coo8s_rc	.418*	.373*	.358*	.366*	.197	.336*	.672*	1.000	
coo9s_rc	.376*	.340*	.361*	.409*	.253	.374*	.785*	.735*	1.000

\* Inter-item correlation values > 0.30.

**TABLE 24****Inter-Item Correlation Matrix – COO Image (China)**

	coo1c_rc	coo2c_rc	coo3c_rc	coo4c_rc	coo5c_rc	coo6c_rc	coo7c_rc	coo8c_rc	coo9c_rc
coo1c_rc	1.000								
coo2c_rc	.551*	1.000							
coo3c_rc	.499*	.717*	1.000						
coo4c_rc	.173	.222	.221	1.000					
coo5c_rc	.081	.193	.208	.457*	1.000				
coo6c_rc	.147	.231	.213	.737*	.578*	1.000			
coo7c_rc	.218	.173	.203	.377*	.232	.310*	1.000		
coo8c_rc	.314*	.249	.264	.324*	.063	.253	.569*	1.000	
coo9c_rc	.247	.179	.231	.315*	.136	.245	.704*	.674*	1.000

\* Inter-item correlation values > 0.30.

Results of inter-item scale consistency are mixed across the three country models. The Japanese and Chinese model display several low inter-item correlation scores across similar item pairs; however the matrix from the South Korean model indicates only one item, *coo5* (people from the specific country are hardworking), that correlates poorly with several of the other scale items. This item also demonstrates poor inter-item correlations

in the Chinese model, but is highly correlated to the other scale items in the Japanese model. In the Chinese model, two other items, *coo6* (how likeable are the people from the specific country) and *coo9* (what degree would the respondent welcome more investment from the specific nation), exhibit low inter-item correlations with over half of the other items with the nine-item scale. As for the Japanese model, both items *coo9* and *coo1* (degree of national wealth within the specific country) indicate low inter-item correlations with the other scale items.

The inter-item correlation matrices for the consumer's animosity towards the specific foreign country are provided in Tables 25 through 27.

**TABLE 25**

**Inter-Item Correlation Matrix – Animosity (Japan)**

	ani1j	ani2j	ani3j	ani4j	ani5j	ani6j	ani7j	ani8j_rc
ani1j	1.000							
ani2j	.475*	1.000						
ani3j	.279	.275	1.000					
ani4j	.401*	.402*	.570*	1.000				
ani5j	.275	.251	.424*	.552*	1.000			
ani6j	.415*	.392*	.395*	.598*	.467*	1.000		
ani7j	.568*	.377*	.260	.445*	.257	.515*	1.000	
ani8j_rc	.463*	.331*	.196	.298	.149	.309*	.437*	1.000

\* Inter-item correlation values > 0.30.

**TABLE 26****Inter-Item Correlation Matrix – Animosity (South Korea)**

	ani1s	ani2s	ani3s	ani4s	ani5s	ani6s	ani7s	ani8s_rc
ani1s	1.000							
ani2s	.567*	1.000						
ani3s	.252	.357*	1.000					
ani4s	.438*	.469*	.551*	1.000				
ani5s	.240	.292	.403*	.510*	1.000			
ani6s	.425*	.457*	.450*	.646*	.538*	1.000		
ani7s	.619*	.490*	.308*	.498*	.333*	.573*	1.000	
ani8s_rc	.527*	.417*	.171	.357*	.124	.338*	.495*	1.000

\* Inter-item correlation values > 0.30.

**TABLE 27****Inter-Item Correlation Matrix – Animosity (China)**

	ani1c	ani2c	ani3c	ani4c	ani5c	ani6c	ani7c	ani8c_rc
ani1c	1.000							
ani2c	.497*	1.000						
ani3c	.291	.325*	1.000					
ani4c	.427*	.452*	.627*	1.000				
ani5c	.281	.320*	.480*	.607*	1.000			
ani6c	.488*	.535*	.465*	.653*	.526*	1.000		
ani7c	.593*	.478*	.321*	.499*	.341*	.579*	1.000	
ani8c_rc	.563*	.390*	.301*	.370*	.243	.414*	.552*	1.000

\* Inter-item correlation values > 0.30.

While these three matrices for animosity indicate an acceptable degree of correlation among the scale items, there are three pairs of scale items that suggest poor inter-item correlations across all three country models. The scale item *ani1* (degree of dislike towards the specific country), exhibits poor levels of correlation with both items *ani3* (the foreign country wants to gain economic power over the United States) and *ani5* (the foreign country has too much economic influence in the U.S.). Additionally, item



*ani5* is poorly correlated with the reverse-coded scale item *ani8* (degree of like towards the specific foreign country). With regards to all six constructs of interest in this study, the scale item pairs that were identified as having weak correlations will be considered for possible omission based on further reliability analyses.

### Item-to-Total Correlations

Another separate-item measure of the scale's consistency is the correlation of the item to the summated scale, commonly referred to as the item-to-total correlation. Measurable items that belong to a scale of a construct are meant to tap into various facets of the same construct and thus should be highly correlated. If low item-to-total correlations are evident, these results indicate that the items do not come from the domain of the same construct and will lead to higher levels of error and low levels of reliability (Churchill 1979). Tables 28 through 33 report the item-to-total correlations of the scale items for all six variables under investigation and provides scores across all three country models. It also lists the scale's Cronbach's alpha and change in the alpha value if the item is removed from the scale.

**TABLE 28**

### Item-to-Total Correlations – Willingness to Buy

Scale item	Japan ( $\alpha=0.840$ )		South Korea ( $\alpha=0.861$ )		China ( $\alpha=0.867$ )	
	Item-to-total correlation	Alpha if item is deleted	Item-to-total correlation	Alpha if item is deleted	Item-to-total correlation	Alpha if item is deleted
wtb1	0.45	0.845**	0.38	0.878**	0.49	0.872**
wtb2_rc	0.64*	0.810	0.67*	0.834	0.67*	0.843
wtb3_rc	0.71*	0.800	0.75*	0.819	0.71*	0.837
wtb4_rc	0.77*	0.782	0.84*	0.800	0.80*	0.818
wtb5_rc	0.78*	0.782	0.83*	0.803	0.82*	0.816
wtb6_rc	0.44	0.861**	0.48	0.874**	0.51*	0.874**

\* Item-to-total correlation values  $> 0.50$ .

\*\* Improvement in alpha if item is deleted.

**TABLE 29****Item-to-Total Correlations – Attitude**

Scale item	Japan ( $\alpha=0.971$ )		South Korea ( $\alpha=0.961$ )		China ( $\alpha=0.974$ )	
	Item-to-total correlation	Alpha if item is deleted	Item-to-total correlation	Alpha if item is deleted	Item-to-total correlation	Alpha if item is deleted
att1	0.95*	0.951	0.92*	0.939	0.95*	0.959
att2	0.94*	0.959	0.92*	0.944	0.95*	0.961
att3	0.93*	0.962	0.91*	0.946	0.94*	0.966

\* Item-to-total correlation values > 0.50.

\*\* Improvement in alpha if item is deleted.

**TABLE 30****Item-to-Total Correlations – Evaluation**

Scale item	Japan ( $\alpha=0.862$ )		South Korea ( $\alpha=0.868$ )		China ( $\alpha=0.851$ )	
	Item-to-total correlation	Alpha if item is deleted	Item-to-total correlation	Alpha if item is deleted	Item-to-total correlation	Alpha if item is deleted
eva1	0.72*	0.825	0.70*	0.839	0.69*	0.815
eva2_rc	0.52*	0.864**	0.52*	0.874**	0.54*	0.844
eva3	0.54*	0.857	0.59*	0.858	0.52*	0.846
eva4	0.71*	0.829	0.74*	0.832	0.67*	0.820
eva5	0.78*	0.816	0.79*	0.823	0.77*	0.799
eva6	0.67*	0.836	0.67*	0.846	0.62*	0.828

\* Item-to-total correlation values > 0.50.

\*\* Improvement in alpha if item is deleted.

**TABLE 31****Item-to-Total Correlations – COO Image**

Scale item	Japan ( $\alpha=0.863$ )		South Korea ( $\alpha=0.864$ )		China ( $\alpha=0.808$ )	
	Item-to-total correlation	Alpha if item is deleted	Item-to-total correlation	Alpha if item is deleted	Item-to-total correlation	Alpha if item is deleted
cool_rc	0.55*	0.853	0.52*	0.856	0.44	0.797
coo2_rc	0.64*	0.844	0.58*	0.851	0.49	0.791
coo3_rc	0.64*	0.844	0.59*	0.850	0.51*	0.789
coo4_rc	0.62*	0.846	0.61*	0.849	0.55*	0.784
coo5_rc	0.58*	0.850	0.45	0.863	0.36	0.806
coo6_rc	0.63*	0.846	0.60*	0.849	0.53*	0.787
coo7_rc	0.62*	0.847	0.69*	0.840	0.56*	0.781
coo8_rc	0.56*	0.852	0.63*	0.846	0.55*	0.783
coo9_rc	0.49	0.860	0.67*	0.842	0.55*	0.783

\* Item-to-total correlation values > 0.50.

\*\* Improvement in alpha if item is deleted.

**TABLE 32****Item-to-Total Correlations – Animosity**

Scale item	Japan ( $\alpha=0.833$ )		South Korea ( $\alpha=0.854$ )		China ( $\alpha=0.868$ )	
	Item-to-total correlation	Alpha if item is deleted	Item-to-total correlation	Alpha if item is deleted	Item-to-total correlation	Alpha if item is deleted
ani1	0.60*	0.808	0.62*	0.833	0.62*	0.853
ani2	0.51*	0.819	0.61*	0.834	0.59*	0.856
ani3	0.50	0.823	0.49	0.850	0.54*	0.861
ani4	0.70*	0.794	0.71*	0.823	0.73*	0.840
ani5	0.49	0.822	0.48	0.849	0.54*	0.860
ani6	0.66*	0.801	0.70*	0.826	0.73*	0.840
ani7	0.59*	0.809	0.68*	0.827	0.67*	0.847
ani8_rc	0.44	0.828	0.49	0.849	0.55*	0.859

\* Item-to-total correlation values  $> 0.50$ .

\*\* Improvement in alpha if item is deleted.

**TABLE 33****Item-to-Total Correlations – CET**

Scale item	United States ( $\alpha=0.967$ )	
	Item-to-total correlation	Alpha if item is deleted
cet1	0.69*	0.966
cet2	0.77*	0.965
cet3	0.74*	0.965
cet4	0.84*	0.964
cet5	0.80*	0.964
cet6	0.84*	0.964
cet7	0.86*	0.963
cet8	0.77*	0.965
cet9	0.76*	0.965
cet10	0.77*	0.965
cet11	0.78*	0.964
cet12	0.80*	0.964
cet13	0.82*	0.964
cet14	0.71*	0.965
cet15	0.72*	0.965
cet16	0.74*	0.965
cet17	0.85*	0.963

\* Item-to-total correlation values  $> 0.50$ .

\*\* Improvement in alpha if item is deleted.

According to Robinson, Shaver and Wrightsman (1991), acceptable reliability values for item-to-total correlations should exceed 0.50. Two indicators from the

willingness to buy scale scored below the minimum cut-off point of 0.50 across all three models and should be evaluated for possible omission from the scale in future analyses. Specifically, the items *wb1* (preference to buy products from a specific foreign country) and *wb6* (would pay 10% more for the U.S. product) have demonstrated weak item-to-total correlations across all of the models and would increase the reliability of the willingness to buy scale if removed from the scale.

### **Cronbach's Alpha**

Cronbach's alpha is a common diagnostic measure used to evaluate the internal consistency of the entire scale of a construct (Robinson, Shaver and Wrightsman 1991) and is defined as:

$$\alpha = \frac{p}{p-1} \left[ 1 - \frac{\sum_{i=1}^p \sigma_i^2}{\sigma_T^2} \right]$$

where  $p$  is the number of items in the scale,  $\sigma_i$  squared is the variance of the  $i^{\text{th}}$  item and  $\sigma_T$  squared is the sum of the item variances and covariances (Iacobucci and Duhachek 2003). Due to the fact that every variable in the empirical model consists of multiple scale items, internal consistency was assessed by generating Cronbach's alpha measures for all of the constructs. As previously mentioned, Tables 28 through 33 include the alpha coefficients for the constructs with respect to the three countries that the U.S. consumers are responding to in this study.

Nunnally (1978) states that a coefficient alpha greater than 0.70 represents a good indication of internal consistency. The study's results reveal that all of the measures exceed this criterion and therefore exhibit internal consistency reliabilities that are within

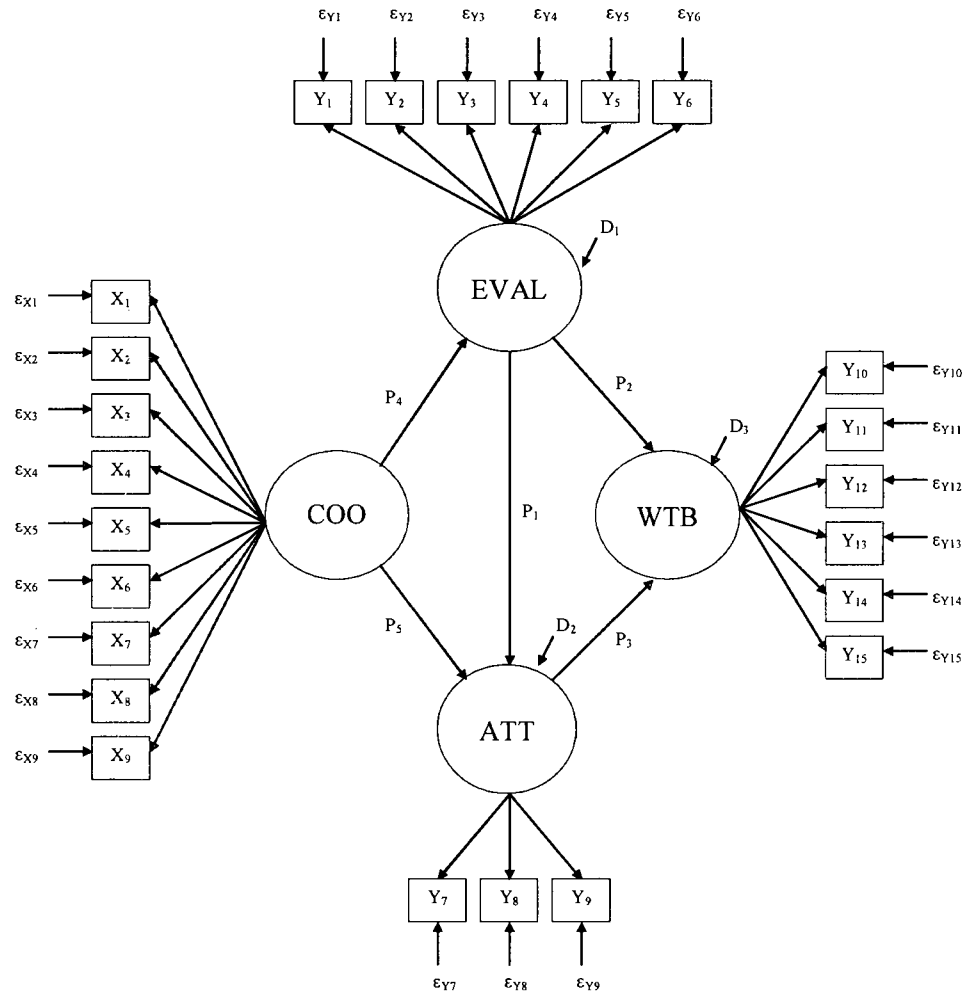
the accepted limits for basic research; however as the field of research statistics evolved, other researchers have since provided further interpretations of acceptable Cronbach's alpha value ranges. DeVellis (1991) recommends the following guidelines for coefficient alpha values: "below 0.60, unacceptable; between 0.60 and 0.65, undesirable; between 0.65 and 0.70, minimally acceptable; between 0.70 and 0.80, respectable; between 0.80 and 0.90, very good" (p. 85). For the endogenous variables (i.e., willingness to buy, attitude and evaluation), their alpha coefficients range from 0.79 to 0.97 and the exogenous variable, country-of-origin image, also exhibited acceptable alpha measures ranging from 0.81 to 0.86. The consumer ethnocentrism and animosity variables are posited to moderate relationships within the main effects model and display sufficient alpha coefficients ranging from 0.80 to 0.96.

In summary, all of the constructs of interest exceed the minimum acceptable alpha value of 0.70 and represent respectable to very good scores of internal consistency. As a result of these strong alpha scores, no further iterations of Cronbach's alpha computations were pursued in order to improve the reliability of the scales. After assessing the scale items with the implementation of various reliability tests, none of the 49 indicators were consistently an issue of internal consistency within all three models (i.e., displayed weak correlations with the other items in their respective scale across most or all reliability tests). Given these overall positive results, all scale items for the six constructs of interest will be retained for future analyses within this study.

## MEASUREMENT ANALYSIS

The data generated from the 800 surveys is empirically evaluated through a series of analyses found within structural equation modeling (SEM). The use of SEM has several advantages over conventional means of analysis, such as conducting a series of multiple regression analysis for each dependent variable in the model. SEM can be used as a confirmatory factor analysis tool to test the dimensionality and validity of each construct within the model (Kline 1998). This analytical tool is also capable of examining a system of hypothesized equations with multiple dependent variables simultaneously (Singh 1995). SEM permits the assessment of the model's performance as a whole by providing multivariate goodness-of-fit indices and permits the researcher to control for measurement error for each construct in the model (Hair *et al.* 1992). It also allows for the comparative analysis of the proposed model to other equivalent and restricted models as well as thorough evaluation of potential model modifications (Kline 1998). From a multigroup analysis perspective, SEM also facilitates the estimation of a system of equations in multiple datasets (Singh 1995); therefore allowing the evaluation of moderating effects within the model. Figure 3 illustrates the hybrid model of the main effects that will be analyzed through SEM with the AMOS software package.

**FIGURE 3**  
**Hybrid Model of Main Effects**



### Assumptions

Given the superiority of SEM to other multivariate techniques for certain research endeavors, it does share three assumptions with these multivariate methods, namely normal distribution, homoscedasticity and linear relationships (Hair *et al.* 2010). These three assumptions must be evaluated to determine if adjustments to or transformations of

the data set are needed in order to produce meaningful statistical results from the SEM analyses.

According to Hair *et al.* (2010), normality is the most important of the three aforementioned assumptions in multivariate analysis and pertains to the bell-like shape of the distribution. Normality states that the distribution of errors of prediction is independently and normally distributed across all levels of the dependent variable. The bell shape of a normal distribution can be accessed along two dimensions; its degree of flatness or peakness (i.e., kurtosis) and its lack of balance (i.e., skewness). Researchers have suggested that “the most commonly used critical values are  $\pm 2.58$  (.01 significance level) and  $\pm 1.96$ , which corresponds to a .05 level” (Hair *et al.* 2010, p. 73). Three separate tables were compiled to assess the descriptive statistics of the sample distribution for data associated with each of the three Asian countries under investigation. Tables 34 through 36 summarize the statistic and standard error for the mean, skewness and kurtosis as well as the standard deviation for all 49 indicators evaluated in the full measurement model (as illustrated by Figure 4). While the 17 items relating to consumer ethnocentrism were analyzed once per respondent, the other statistics are computed three times to assess each U.S. consumer’s perceptions of Japanese, South Korean and Chinese products (i.e., 32 indicators multiplied by three country models for a total of 96 computations). After careful analysis of the skewness and kurtosis values across all three models, it is determined that the measures for all of the scale variables provide evidence of tolerable symmetrical distributions, thus supporting the critical assumption of normality.



TABLE 34

## Variable Descriptive Statistics – Japan

Item	Mean		Std. Dev.	Skewness		Kurtosis		Item	Mean		Std. Dev.	Skewness		Kurtosis	
	Stat.	S.E.		Stat.	S.E.	Stat.	S.E.		Stat.	S.E.		Stat.	S.E.	Stat.	S.E.
X <sub>1</sub>	5.18	0.05	1.39	-0.68	0.09	0.20	0.17	X <sub>26</sub>	2.54	0.06	1.62	0.68	0.09	-0.47	0.17
X <sub>2</sub>	5.58	0.05	1.51	-1.22	0.09	1.05	0.17	X <sub>27</sub>	3.04	0.06	1.58	0.46	0.09	-0.33	0.17
X <sub>3</sub>	5.81	0.06	1.58	-1.50	0.09	1.47	0.17	X <sub>28</sub>	3.06	0.06	1.65	0.50	0.09	-0.45	0.17
X <sub>4</sub>	4.72	0.05	1.47	-0.27	0.09	-0.18	0.17	X <sub>29</sub>	4.53	0.07	1.85	-0.34	0.09	-0.79	0.17
X <sub>5</sub>	5.28	0.05	1.52	-0.77	0.09	0.13	0.17	X <sub>30</sub>	3.88	0.06	1.75	0.00	0.09	-0.70	0.17
X <sub>6</sub>	4.88	0.05	1.40	-0.33	0.09	-0.01	0.17	X <sub>31</sub>	4.37	0.06	1.68	-0.21	0.09	-0.63	0.17
X <sub>7</sub>	4.87	0.06	1.56	-0.45	0.09	-0.32	0.17	X <sub>32</sub>	3.52	0.06	1.57	0.13	0.09	-0.36	0.17
X <sub>8</sub>	4.38	0.05	1.41	-0.12	0.09	-0.10	0.17	X <sub>33</sub>	4.20	0.07	2.03	-0.14	0.09	-1.21	0.17
X <sub>9</sub>	4.61	0.06	1.64	-0.31	0.09	-0.55	0.17	X <sub>34</sub>	4.17	0.07	1.94	-0.10	0.09	-1.01	0.17
X <sub>10</sub>	5.09	0.06	1.63	-0.82	0.09	0.05	0.17	X <sub>35</sub>	2.94	0.07	1.86	0.69	0.09	-0.58	0.17
X <sub>11</sub>	4.98	0.06	1.63	-0.60	0.09	-0.24	0.17	X <sub>36</sub>	3.63	0.07	1.93	0.22	0.09	-1.05	0.17
X <sub>12</sub>	4.99	0.05	1.46	-0.47	0.09	-0.12	0.17	X <sub>37</sub>	3.18	0.07	1.95	0.47	0.09	-0.98	0.17
X <sub>13</sub>	5.75	0.05	1.43	-1.26	0.09	1.26	0.17	X <sub>38</sub>	4.02	0.07	1.97	-0.04	0.09	-1.17	0.17
X <sub>14</sub>	5.38	0.05	1.53	-0.92	0.09	0.42	0.17	X <sub>39</sub>	3.68	0.07	1.88	0.16	0.09	-1.06	0.17
X <sub>15</sub>	5.15	0.05	1.43	-0.56	0.09	-0.11	0.17	X <sub>40</sub>	4.39	0.07	1.86	-0.24	0.09	-0.93	0.17
X <sub>16</sub>	5.16	0.05	1.52	-0.69	0.09	0.02	0.17	X <sub>41</sub>	4.14	0.07	1.90	-0.14	0.09	-1.08	0.17
X <sub>17</sub>	5.11	0.05	1.52	-0.64	0.09	-0.07	0.17	X <sub>42</sub>	3.22	0.07	1.74	0.41	0.09	-0.71	0.17
X <sub>18</sub>	5.15	0.05	1.55	-0.69	0.09	-0.03	0.17	X <sub>43</sub>	4.49	0.07	1.86	-0.33	0.09	-0.88	0.17
X <sub>19</sub>	4.62	0.06	1.83	-0.50	0.09	-0.64	0.17	X <sub>44</sub>	4.09	0.07	1.88	-0.09	0.09	-0.97	0.17
X <sub>20</sub>	5.34	0.06	1.76	-0.85	0.09	-0.25	0.17	X <sub>45</sub>	3.52	0.06	1.79	0.23	0.09	-0.90	0.17
X <sub>21</sub>	5.76	0.06	1.61	-1.21	0.09	0.60	0.17	X <sub>46</sub>	3.70	0.06	1.75	0.11	0.09	-0.77	0.17
X <sub>22</sub>	5.38	0.07	1.85	-0.96	0.09	-0.14	0.17	X <sub>47</sub>	2.84	0.06	1.68	0.68	0.09	-0.34	0.17
X <sub>23</sub>	5.47	0.06	1.77	-0.96	0.09	-0.07	0.17	X <sub>48</sub>	3.53	0.07	1.84	0.23	0.09	-0.94	0.17
X <sub>24</sub>	4.10	0.08	2.27	-0.06	0.09	-1.46	0.17	X <sub>49</sub>	3.64	0.07	1.91	0.16	0.09	-1.06	0.17
X <sub>25</sub>	2.57	0.06	1.60	0.72	0.09	-0.35	0.17	N=800; Minimum=1; Maximum=7.							

**TABLE 35**  
**Variable Descriptive Statistics – South Korea**

Item	Mean		Std. Dev.	Skewness		Kurtosis		Item	Mean		Std. Dev.	Skewness		Kurtosis	
	Stat.	S.E.		Stat.	S.E.	Stat.	S.E.		Stat.	S.E.		Stat.	S.E.	Stat.	S.E.
X <sub>1</sub>	3.34	0.05	1.35	0.04	0.09	-0.44	0.17	X <sub>26</sub>	2.84	0.06	1.77	0.55	0.09	-0.64	0.17
X <sub>2</sub>	3.80	0.05	1.39	-0.03	0.09	-0.21	0.17	X <sub>27</sub>	3.63	0.06	1.58	0.17	0.09	-0.26	0.17
X <sub>3</sub>	3.85	0.05	1.40	-0.04	0.09	-0.28	0.17	X <sub>28</sub>	3.73	0.06	1.66	0.09	0.09	-0.47	0.17
X <sub>4</sub>	4.15	0.05	1.41	-0.08	0.09	0.21	0.17	X <sub>29</sub>	4.32	0.06	1.72	-0.14	0.09	-0.64	0.17
X <sub>5</sub>	4.78	0.05	1.43	-0.24	0.09	-0.22	0.17	X <sub>30</sub>	3.90	0.06	1.68	-0.00	0.09	-0.48	0.17
X <sub>6</sub>	4.34	0.05	1.38	-0.05	0.09	0.24	0.17	X <sub>31</sub>	3.72	0.05	1.46	-0.03	0.09	-0.10	0.17
X <sub>7</sub>	3.97	0.06	1.61	-0.10	0.09	-0.52	0.17	X <sub>32</sub>	3.60	0.05	1.49	0.00	0.09	-0.13	0.17
X <sub>8</sub>	3.53	0.05	1.43	0.06	0.09	-0.19	0.17	X <sub>33</sub>	4.20	0.07	2.03	-0.14	0.09	-1.21	0.17
X <sub>9</sub>	3.78	0.06	1.60	0.01	0.09	-0.49	0.17	X <sub>34</sub>	4.17	0.07	1.94	-0.10	0.09	-1.01	0.17
X <sub>10</sub>	3.54	0.05	1.47	-0.01	0.09	-0.39	0.17	X <sub>35</sub>	2.94	0.07	1.86	0.69	0.09	-0.58	0.17
X <sub>11</sub>	3.77	0.06	1.63	0.06	0.09	-0.61	0.17	X <sub>36</sub>	3.63	0.07	1.93	0.22	0.09	-1.05	0.17
X <sub>12</sub>	3.90	0.05	1.41	-0.14	0.09	0.13	0.17	X <sub>37</sub>	3.18	0.07	1.95	0.47	0.09	-0.98	0.17
X <sub>13</sub>	3.93	0.05	1.48	-0.12	0.09	-0.22	0.17	X <sub>38</sub>	4.02	0.07	1.97	-0.04	0.09	-1.17	0.17
X <sub>14</sub>	3.71	0.05	1.46	-0.05	0.09	-0.30	0.17	X <sub>39</sub>	3.68	0.07	1.88	0.16	0.09	-1.06	0.17
X <sub>15</sub>	3.99	0.05	1.50	-0.08	0.09	-0.23	0.17	X <sub>40</sub>	4.39	0.07	1.86	-0.24	0.09	-0.93	0.17
X <sub>16</sub>	3.81	0.05	1.47	-0.14	0.09	-0.15	0.17	X <sub>41</sub>	4.14	0.07	1.90	-0.14	0.09	-1.08	0.17
X <sub>17</sub>	3.80	0.05	1.44	-0.13	0.09	-0.06	0.17	X <sub>42</sub>	3.22	0.07	1.74	0.41	0.09	-0.71	0.17
X <sub>18</sub>	3.84	0.05	1.46	-0.10	0.09	-0.05	0.17	X <sub>43</sub>	4.49	0.07	1.86	-0.33	0.09	-0.88	0.17
X <sub>19</sub>	3.27	0.05	1.52	0.03	0.09	-0.65	0.17	X <sub>44</sub>	4.09	0.07	1.88	-0.09	0.09	-0.97	0.17
X <sub>20</sub>	4.69	0.07	1.93	-0.38	0.09	-0.94	0.17	X <sub>45</sub>	3.52	0.06	1.79	0.23	0.09	-0.90	0.17
X <sub>21</sub>	5.03	0.07	1.94	-0.62	0.09	-0.79	0.17	X <sub>46</sub>	3.70	0.06	1.75	0.11	0.09	-0.77	0.17
X <sub>22</sub>	4.59	0.07	2.06	-0.37	0.09	-1.08	0.17	X <sub>47</sub>	2.84	0.06	1.68	0.68	0.09	-0.34	0.17
X <sub>23</sub>	4.64	0.07	1.98	-0.34	0.09	-1.02	0.17	X <sub>48</sub>	3.53	0.07	1.84	0.23	0.09	-0.94	0.17
X <sub>24</sub>	3.65	0.08	2.21	0.25	0.09	-1.33	0.17	X <sub>49</sub>	3.64	0.07	1.91	0.16	0.09	-1.06	0.17
X <sub>25</sub>	3.15	0.06	1.74	0.40	0.09	-0.69	0.17	N=800; Minimum=1; Maximum=7.							

**TABLE 36**  
**Variable Descriptive Statistics – China**

Item	Mean		Std. Dev.	Skewness		Kurtosis		Item	Mean		Std. Dev.	Skewness		Kurtosis	
	Stat.	S.E.		Stat.	S.E.	Stat.	S.E.		Stat.	S.E.		Stat.	S.E.	Stat.	S.E.
X <sub>1</sub>	3.66	0.06	1.62	0.24	0.09	-0.69	0.17	X <sub>26</sub>	3.25	0.07	2.05	0.40	0.09	-1.08	0.17
X <sub>2</sub>	4.24	0.06	1.69	-0.09	0.09	-0.92	0.17	X <sub>27</sub>	3.67	0.06	1.70	0.15	0.09	-0.60	0.17
X <sub>3</sub>	4.38	0.06	1.62	-0.15	0.09	-0.71	0.17	X <sub>28</sub>	3.92	0.07	1.88	0.02	0.09	-1.00	0.17
X <sub>4</sub>	4.02	0.05	1.52	-0.05	0.09	-0.21	0.17	X <sub>29</sub>	5.24	0.06	1.82	-0.90	0.09	-0.19	0.17
X <sub>5</sub>	5.02	0.06	1.58	-0.60	0.09	-0.19	0.17	X <sub>30</sub>	4.68	0.07	1.90	-0.41	0.09	-0.83	0.17
X <sub>6</sub>	4.35	0.05	1.44	-0.11	0.09	-0.02	0.17	X <sub>31</sub>	5.00	0.06	1.75	-0.65	0.09	-0.44	0.17
X <sub>7</sub>	4.13	0.06	1.76	-0.10	0.09	-0.76	0.17	X <sub>32</sub>	4.22	0.06	1.83	-0.09	0.09	-0.81	0.17
X <sub>8</sub>	3.39	0.06	1.58	0.24	0.09	-0.48	0.17	X <sub>33</sub>	4.20	0.07	2.03	-0.14	0.09	-1.21	0.17
X <sub>9</sub>	3.72	0.06	1.81	0.08	0.09	-0.85	0.17	X <sub>34</sub>	4.17	0.07	1.94	-0.10	0.09	-1.01	0.17
X <sub>10</sub>	3.44	0.06	1.73	0.26	0.09	-0.84	0.17	X <sub>35</sub>	2.94	0.07	1.86	0.69	0.09	-0.58	0.17
X <sub>11</sub>	3.52	0.06	1.81	0.24	0.09	-0.91	0.17	X <sub>36</sub>	3.63	0.07	1.93	0.22	0.09	-1.05	0.17
X <sub>12</sub>	4.29	0.06	1.57	-0.14	0.09	-0.38	0.17	X <sub>37</sub>	3.18	0.07	1.95	0.47	0.09	-0.98	0.17
X <sub>13</sub>	4.22	0.06	1.67	-0.13	0.09	-0.71	0.17	X <sub>38</sub>	4.02	0.07	1.97	-0.04	0.09	-1.17	0.17
X <sub>14</sub>	3.68	0.06	1.72	0.09	0.09	-0.88	0.17	X <sub>39</sub>	3.68	0.07	1.88	0.16	0.09	-1.06	0.17
X <sub>15</sub>	4.18	0.06	1.72	-0.15	0.09	-0.75	0.17	X <sub>40</sub>	4.39	0.07	1.86	-0.24	0.09	-0.93	0.17
X <sub>16</sub>	3.68	0.06	1.70	0.13	0.09	-0.78	0.17	X <sub>41</sub>	4.14	0.07	1.90	-0.14	0.09	-1.08	0.17
X <sub>17</sub>	3.66	0.06	1.69	0.15	0.09	-0.73	0.17	X <sub>42</sub>	3.22	0.07	1.74	0.41	0.09	-0.71	0.17
X <sub>18</sub>	3.65	0.06	1.71	0.16	0.09	-0.75	0.17	X <sub>43</sub>	4.49	0.07	1.86	-0.33	0.09	-0.88	0.17
X <sub>19</sub>	3.33	0.06	1.82	0.30	0.09	-0.88	0.17	X <sub>44</sub>	4.09	0.07	1.88	-0.09	0.09	-0.97	0.17
X <sub>20</sub>	4.52	0.07	2.11	-0.25	0.09	-1.27	0.17	X <sub>45</sub>	3.52	0.06	1.79	0.23	0.09	-0.90	0.17
X <sub>21</sub>	5.02	0.07	1.99	-0.57	0.09	-0.95	0.17	X <sub>46</sub>	3.70	0.06	1.75	0.11	0.09	-0.77	0.17
X <sub>22</sub>	4.32	0.08	2.20	-0.17	0.09	-1.39	0.17	X <sub>47</sub>	2.84	0.06	1.68	0.68	0.09	-0.34	0.17
X <sub>23</sub>	4.49	0.08	2.14	-0.25	0.09	-1.30	0.17	X <sub>48</sub>	3.53	0.07	1.84	0.23	0.09	-0.94	0.17
X <sub>24</sub>	3.53	0.08	2.28	0.33	0.09	-1.38	0.17	X <sub>49</sub>	3.64	0.07	1.91	0.16	0.09	-1.06	0.17
X <sub>25</sub>	3.15	0.06	1.84	0.37	0.09	-0.89	0.17	N=800; Minimum=1; Maximum=7							

The assumption of linearity states that the relationship between the dependent variable and the residuals is linear within a normal distribution. It is commonly assessed by evaluating the normal probability plots to determine any nonlinear relationships between two variables (Hair *et al.* 2010). These plot graphs were graphed within the SPSS statistical software for every main effects relationship illustrated in Figure 3, thus resulting in the analysis of five bivariate relationships. Upon close inspection, the normal probability plots illustrated reasonable degrees of linearity and no variable transformations were conducted due to nonlinearity.

The condition in which equal degrees of variance exists across the range of independent variables is referred to as homoscedasticity. In conditions where metric variables are under investigation, homoscedasticity is also best assessed by examining the bivariate scatterplots of these variables (Hair *et al.* 2010). The visual inspection of the scatterplots created in the SPSS program demonstrate a reasonably equal spread of variance across the independent variables in the model, thus providing evidence to support the assumption of homoscedasticity. Given these positive results, no variable transformations were conducted.

### **Confirmatory Factor Analysis**

The constructs were subjected to confirmatory factor analysis (CFA) to verify that the manifest variables load upon the proposed constructs and are indeed indicative of these constructs. The combination of CFA and construct validity assessments allows the researcher to evaluate the quality of their measures within a measurement model prior to testing the structural model (Hair *et al.* 2010). The full-information CFA approach is utilized, whereby all parameters of the measurement model are estimated simultaneously

for the three country models (Anderson and Gerbing 1982). Given that the normality of the data has been established, maximum likelihood estimation procedures are deemed appropriate and are used to estimate the parameters. Furthermore, these estimations are generated from the actual data set rather than from covariance or correlation matrices. Goodness-of-fit assessments of the model and its factor loadings will be evaluated to determine how well the data fits the proposed model and if the indicators load on the theorized constructs. Re-evaluation of the construct's composition will be necessary for any factor analysis results that indicate poor variable fit.

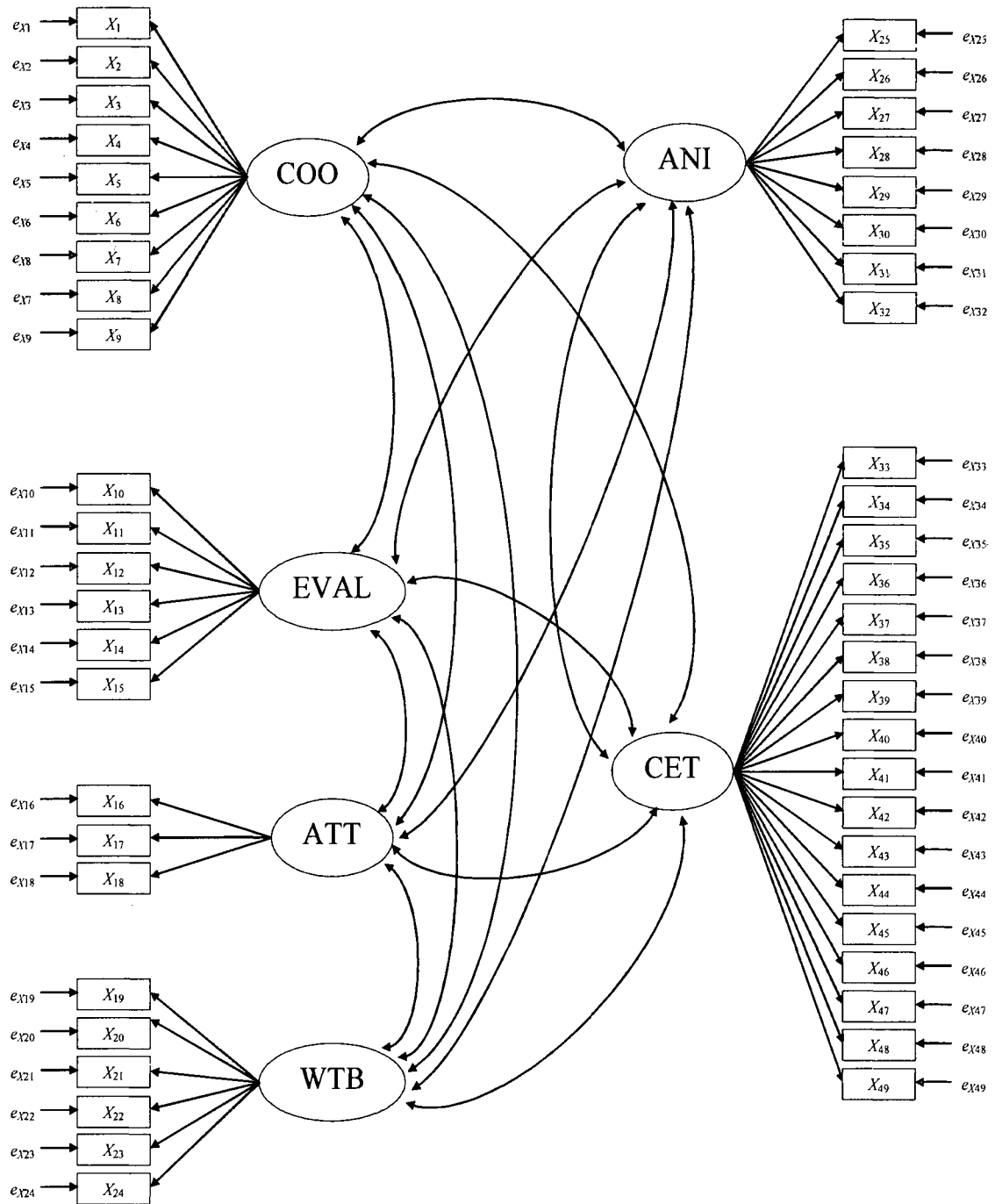
Figure 4 provides a graphical representation of the full measurement model. It consists of six latent variables and 49 indicators, whereby each relationship between constructs and indicators that is represented in the model is specified a priori from marketing theory. The first set of nine indicators ( $X_1$  to  $X_9$ ) corresponds with the six scale items of the country-of-origin image construct. The next set of indicators ( $X_{10}$  to  $X_{15}$ ) comprises the scale for the consumer's evaluation of the foreign product and the three-item scale ( $X_{16}$  to  $X_{18}$ ) represents her attitude towards that product. The scale consisting of indicators  $X_{19}$  to  $X_{24}$  reflects the consumer's willingness to purchase the foreign product and is considered as the consequence of the other variables in the study. Two moderating variables, animosity and consumer ethnocentrism, are represented in the measurement model by the indicator sets  $X_{25}$  to  $X_{32}$  and  $X_{33}$  to  $X_{49}$ , respectively.

Each of the 49 indicators has an individual error term associated with it and all six constructs are allowed to covary with one another (represented by the curved covariance paths in the diagram). To assign the scale of each factor, one path from each of the six latent variables to one of its indicator is fixed to the value of 1.0. According to the three-

indicator rule, the confirmatory factor model in this study is considered to be identified (Blunch 2008). The first rule states that every factor in the model must have a minimum of three indicators. Secondly, the error terms must not be correlated to one another and the third rule stipulates that none of the manifest variables are indicators for more than one latent variable. In addition to being identified, the measurement model is also recursive.

**FIGURE 4**

**Full Measurement Model**



## Measurement Model Validity

As previously stated, a confirmatory factor analysis was conducted with all of the constructs included in the measurement model and allowed to correlate with one another. To assess the fit between the data and the model for each of the three foreign countries under investigation, three separate country models were estimated with the AMOS software. Hair *et al.* (2010) states that a model's degrees of freedom are computed as:

$$df = \frac{1}{2}[(p)(p + 1)] - k$$

where  $p$  is the number of observed variables and  $k$  is the number of estimated parameters. Given that all three models are identical with regards to their number of parameters and observed variables, the degrees of freedom for these models are 1112 with 113 estimated parameters and 49 observed variables. Evaluating three models rather than the typical single model with SEM poses unique challenges and has led to a key decision rule that is utilized throughout this study. A finding is considered as supported if evidence of statistical significance is found for at least one of the three models. By utilizing this rule, all significant findings will be reported in the study and the structures of the three models will more likely remain equivalent throughout the analyses and can be compared to one another without issue.

Table 37 provides a summary of the key measures of fit for each of the three models. Hair *et al.* (2010) suggest that researchers should provide a minimum of “one absolute fit index and one incremental fit index, in addition to the  $\chi^2$  results” (p. 698) and that three to four fit indexes provide adequate evidence of model fit. Furthermore, Kline (1998) also suggests the inclusion of a fit index that adjusts the explained variance for the model's degree of complexity. Following these authors' guidelines, the table provides



four fit statistics;  $\chi^2$  (chi-square statistic),  $\chi^2/df$  (normed  $\chi^2$ ), RMSEA (root mean square error of approximation), CFI (comparative fit index) and TLI (Tucker-Lewis index).

**TABLE 37**

**Fit Statistics – Measurement Model**

Country	$\chi^2 (p)$	$df$	$\chi^2/df$	RMSEA	LO 90	HI 90	CFI	TLI
Japan	6222.202 (0.000)	1112	5.596	0.076	0.074	0.078	0.828	0.818
South Korea	5682.152 (0.000)	1112	5.110	0.072	0.070	0.074	0.846	0.837
China	5900.628 (0.000)	1112	5.306	0.073	0.072	0.075	0.837	0.828

The overall model  $\chi^2$  statistic for the Japanese, South Korean and Chinese models are 6222.202, 5682.152 and 5900.628, respectively. All three models indicate a  $p$ -value of 0.000 with regards to their  $\chi^2$  value, illustrating statistical significance at the 0.05 level. At first glance, this outcome suggests a poor fit between the measurement model and the data; however the study's large sample size of 800 respondents may be the culprit rather than poor fit. According to Kline (1998), large sample sizes have high power, which promotes the detection of even the smallest discrepancies between the actual model and the theoretical model, thus leading to the rejection that no significance differences exist between the two models. The assessment of additional fit indices other than  $\chi^2$  is necessary to make substantiated conclusions about model fit.

An alternative measure of global fit that researchers commonly utilize is referred to as the normed  $\chi^2$ , computed as the  $\chi^2$  statistic divided by the model's degrees of freedom. Hair *et al.* (2010) prescribe that "a number smaller than 2.0 is considered very good, and between 2.0 and 5.0 is acceptable" (p. 698). Given these guidelines, all three

models fall just beyond the acceptable range of values that constitute good absolute fit with normed  $\chi^2$  scores ranging from 5.11 to 5.60.

Another fit statistic that evaluates the relationship between  $\chi^2$  and  $df$  is the root mean square error of approximation, computed as:

$$RMSEA = \sqrt{\frac{NCP}{df(N-1)}}$$

where  $N$  is the sample size and  $NCP$  (the noncentrality parameter) is either  $\chi^2 - df$  when positive or a value of zero when negative. One commonly-used guideline for RMSEA fit assessment suggests that values below 0.08 indicate good fit while values less than 0.05 suggest excellent fit (Kline 1998). The three tested models have RMSEA values ranging from 0.072 to 0.076, thus falling below the cut-off score of 0.08 and providing support of good model fit.

As for incremental fit measures, two fit statistics were employed in this study. First, the CFI index compares the theorized model to the null model (i.e., the model in which all observed variables are uncorrelated) and is computed as:

$$CFI = 1 - \frac{\chi_k^2 - df_k}{\chi_N^2 - df_N}$$

where  $k$  is the value associated with the specified model and  $N$  is the value associated with the null model. An advantage of CFI to other incremental fit statistics is that it is less affected by the sample size and is therefore considered a robust and popular measure among researchers (Kline 1998). The CFI values range from zero to 1.0 and values that exceed 0.90 indicate adequate model fit (Bentler 1990). Unfortunately, the values of the three tested models 0.828 to 0.846, which falls just short of the minimum 0.90 cut-off

point and suggests less-than-adequate model fit, but approaching near acceptable levels of CFI fit.

An alternative measure of incremental fit is the TLI statistic, also commonly known as NNFI (the non-normed fit index). Once again, the theorized model is being compared to a null model or a nested baseline model and the TLI score is computed as:

$$TLI = \frac{\left[ \left( \frac{\chi_N^2}{df_N} \right) - \left( \frac{\chi_k^2}{df_k} \right) \right]}{\left[ \left( \frac{\chi_N^2}{df_N} \right) - 1 \right]}$$

where  $k$  and  $N$  refer to the specified and null models, respectively. Other similarities of the TLI measure to CFI include insensitivity towards sample size variations and a typical range of values between zero and 1.0 (Marsh *et al.* 1998); however TLI values are not limited to this range and can fall below zero and above 1.0 (Hair *et al.* 2010). According to Bentler and Bonett (1988), a TLI value that exceeds a minimum cut-off of 0.90 indicates an adequate degree of model fit. The TFI values for the three tested models in Table 37 range from 0.818 to 0.837 and do not support evidence of acceptable model fit, but are once again closely approaching adequate fit levels. In summary, an initial analysis of fit measures for the proposed model provides evidence that the model falls just short of acceptable levels of fit and should be reevaluated with modifications that are justifiable in theory and may aid in improving overall model fit.

### **Model Modifications**

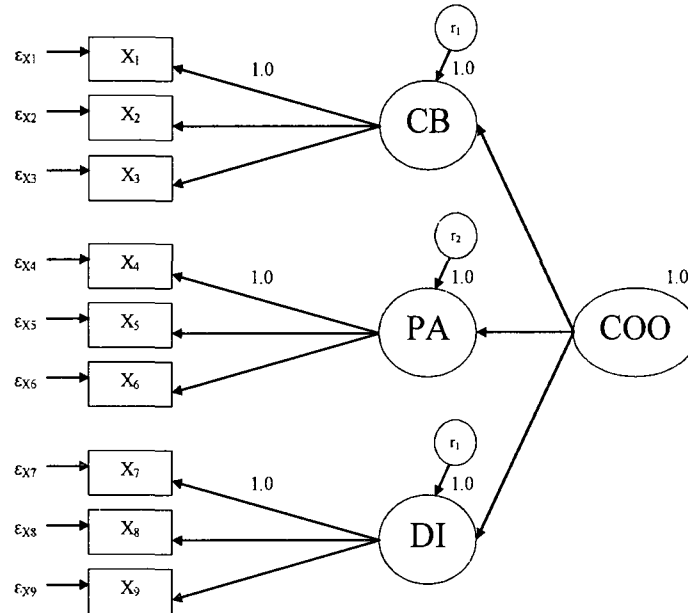
Researchers may consider conducting modifications to their original model if the model's fit is determined to be unsatisfactory across various fit indices. While respecifying the model may lead to better model fit, caution should be taken to justify the

modification of the model through sound, theoretically-based reasoning. Researchers who use the modification indices that are produced by the SEM software as output to solely guide their model changes are conducting poor research and this practice should be avoided; however making alterations to the model that are based on theory and logic may aid in the understanding of the relationships between the constructs and their indicators, thus advancing the study of the phenomena being examined.

After scrutinizing the modification indices of all three country models, it became apparent that the country-of-origin image variable was by far the most problematic construct across all models and was likely misspecified in the CFA. After returning to the literature for clarification, it was determined that, while COO image has been conceptualized in a variety of dimensional structures, the latest research studies view it as a multi-faceted construct with multiple scale items to represent each facet. As a result, it was decided that this variable should be respecified as a second-order model of factorial structure, as recently proposed by Laroche *et al.* (2005). Figure 5 illustrates the new factorial structure of COO image that will replace the construct's unidimensional structure within the measurement model in Figure 4 (i.e., the original portrayal of the full CFA model). COO image is now represented as a three dimensional construct with CB as country beliefs (represents consumers' beliefs about the country), PA as people affect (portrays how consumers feel about the people from the country) and DI as desired interaction (shows the degree of interaction that consumers want to have with the country and its inhabitants).

**FIGURE 5**

**2<sup>nd</sup> Order Factorial Structure of COO Image**

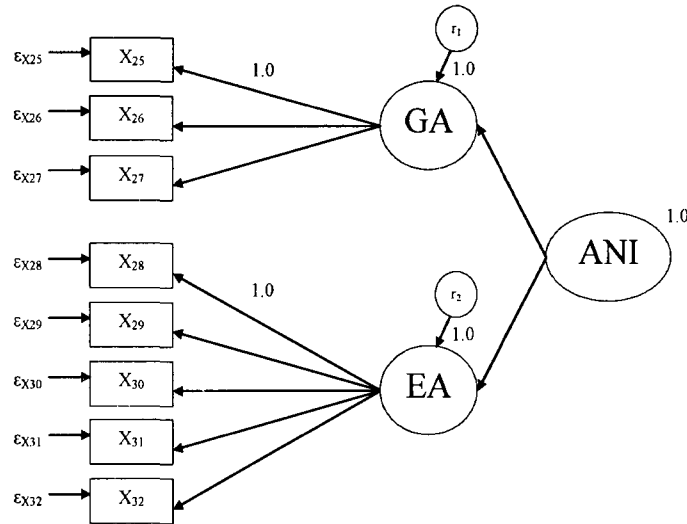


Using a similar vein of logic and theoretical reasoning, it is also appropriate to represent the animosity construct as a multi-dimensional factor in the model. Like COO image, the consumer animosity variable has undergone various structural changes since it's inception as a marketing variable (Klein, Ettenson, and Morris 1998). While the construct has generally been considered as having multiple dimensions, the scales for each of these dimensions have varied greatly due to uniqueness of one country's underlying reasons for its animosity towards other countries. In this study, economic animosity and general animosity dimensions are critically important with regards to U.S. consumers. Figure 6 illustrates the two-dimensional factorial structure of animosity that will be utilized in subsequent analyses. The five economic-related animosity items from Klein, Ettenson and Morris (1998) are adapted to reflect the economic animosity of U.S.

consumers towards another country. To ascertain their degree of general animosity towards the country, the three-item scale developed by Klein (2002) will be utilized.

**FIGURE 6**

**2<sup>nd</sup> Order Factorial Structure of Animosity**



All three country models were analyzed again by confirmatory factor analysis with the new factorial structures of the country-of-origin image and animosity variables included in the measurement model. Since the three models are identical with regards to their number of parameters and observed variables, the degrees of freedom for these models are 1107 with 118 estimated parameters and 49 observed variables. Table 38 summarizes the key measures of fit for each of the three models for comparison with the fit measures from the previous table.

**TABLE 38****Fit Statistics – Modified CFA Model**

<b>Country</b>	<b><math>\chi^2 (p)</math></b>	<b><math>df</math></b>	<b><math>\chi^2/df</math></b>	<b>RMSEA</b>	<b>LO 90</b>	<b>HI 90</b>	<b>CFI</b>	<b>TLI</b>
Japan	3811.971 (0.000)	1107	3.444	0.055	0.053	0.057	0.909	0.903
South Korea	3867.325 (0.000)	1107	3.494	0.056	0.054	0.058	0.907	0.901
China	4132.020 (0.000)	1107	3.733	0.058	0.057	0.060	0.897	0.891

In general, all fit measures improved substantially with the modifications to the original CFA model. The overall model  $\chi^2$  statistics for the three country models now range from 3811.97 to 4132.02 and are still statistically significant, but as stated previously, this is common for large sample sizes and requires the assessment of additional fit indices. The alternative global fit measure, the normed  $\chi^2$ , now ranges in value from 3.44 to 3.73, indicating acceptable fit according to the standards put forth by Hair *et al.* (2010). In the original measurement model, these values fell short of the 5.0 cut-off value and were not acceptable. The RMSEA fit assessment remains significant and actually indicates an improved degree of fit across all three models. Its values now range from 0.055 to 0.058 and is approaching values that indicate an excellent degree of model fit (Kline 1998).

As for incremental fit measures, the two fit statistics previously assessed have improved dramatically. First, the CFI index for the Japanese, South Korean and Chinese models are valued at 0.897, 0.907 and 0.909, respectively. Given that CFI values exceeding 0.90 indicate adequate model fit (Bentler 1990), two of the three models exceed this criteria and the Chinese model is at the threshold of acceptable fit. Similar results are found for the TLI incremental fit statistic (also known as the non-normed fit

index). While the TLI values for the Japanese and South Korean models surpass the minimum score of 0.90 for adequate fit (Bentler and Bonett 1988), the Chinese model falls just shy of this cut-off value. In summary, all fit measurements improved dramatically with the modified measurement models and nearly all of them demonstrated acceptable levels of model fit.

### **Construct Validity**

While reliability refers to the accuracy of the construct scales (i.e., its internal consistency), construct validity refers to “how they should be interpreted” (Kline 1998, p. 195). The reliability of the constructs was addressed previously in this chapter and is a necessary condition for validity; however a construct whose scale is reliable does not automatically make it a valid construct. Content validity refers to an analysis “of the correspondence of the variables to be included in a summated scale and its conceptual definition” (Hair *et al.* 2010, p. 125) and is conducted through a subjective assessment rather than an empirical test. Given that the scales utilized in this study were previously established and used in theory development, empirical analyses and practical application, these scales have adequately demonstrated face validity. Two additional types of validities are of particular interest when assessing measurement models in SEM. Convergent validity is demonstrated when each factor is comprised of variables that correlate positively with each other. In contrast, a construct exudes a high degree of discriminant validity when it can be differentiated from the scales that comprise the other variables in the model.

In confirmatory factor analysis, convergent validity is apparent when there is a high degree of shared common variance among the indicators of a construct (Hair *et al.*



2010). Initially, the authors prescribe that the maximum likelihood estimates should be evaluated for statistical significance. These estimates are unstandardized factor loadings between the constructs and their indicators and are referred to as regression weights in AMOS. Tables 39 through 43 illustrate these unstandardized regression weights as well as their associated standard errors and critical ratios. Given that all of the p-values are less than 0.001, the unstandardized factor loadings are statistically significant at the 0.05 level.

**TABLE 39**  
**Regression Weights – COO Image**

Path	Japan			South Korea			China		
	Weight	S. E.	C. R.	Weight	S. E.	C. R.	Weight	S. E.	C. R.
COO→CB	0.519	0.045	11.451*	0.549	0.043	12.845*	0.403	0.049	8.272
CB→X <sub>1</sub>	1.000	– <sup>a</sup>	– <sup>a</sup>	1.000	– <sup>a</sup>	– <sup>a</sup>	1.000	– <sup>a</sup>	– <sup>a</sup>
CB→X <sub>2</sub>	1.370	0.050	27.354*	1.286	0.059	21.860*	1.458	0.083	17.50
CB→X <sub>3</sub>	1.395	0.052	26.771*	1.316	0.060	22.056*	1.307	0.075	17.32
COO→PA	0.842	0.054	15.724*	0.806	0.051	15.867*	0.680	0.059	11.54
PA→X <sub>4</sub>	1.000	– <sup>a</sup>	– <sup>a</sup>	1.000	– <sup>a</sup>	– <sup>a</sup>	1.000	– <sup>a</sup>	– <sup>a</sup>
PA→X <sub>5</sub>	0.927	0.038	24.691*	0.901	0.045	19.968*	0.778	0.047	16.66
PA→X <sub>6</sub>	0.985	0.034	28.996*	1.086	0.046	23.631*	1.063	0.049	21.60
COO→DI	1.063	0.056	19.066*	1.049	0.057	18.486*	1.047	0.065	16.16
DI→X <sub>7</sub>	1.000	– <sup>a</sup>	– <sup>a</sup>	1.000	– <sup>a</sup>	– <sup>a</sup>	1.000	– <sup>a</sup>	– <sup>a</sup>
DI→X <sub>8</sub>	0.836	0.033	25.651*	0.817	0.030	26.786*	0.862	0.040	21.48
DI→X <sub>9</sub>	0.940	0.037	25.404*	1.038	0.032	31.990*	1.157	0.046	24.96

\* p-value is less than .001 and is significant.

<sup>a</sup> Not estimated when loading set to fixed value (i.e., 1.0)

**TABLE 40****Regression Weights – Evaluation**

Path	Japan			South Korea			China		
	Weight	S. E.	C. R.	Weight	S. E.	C. R.	Weight	S. E.	C. R.
EVAL→X <sub>10</sub>	1.000	– <sup>a</sup>	– <sup>a</sup>	1.000	– <sup>a</sup>	– <sup>a</sup>	1.000	– <sup>a</sup>	– <sup>a</sup>
EVAL→X <sub>11</sub>	0.742	0.043	17.157*	0.839	0.051	16.586*	0.813	0.046	17.655*
EVAL→X <sub>12</sub>	0.643	0.039	16.356*	0.786	0.044	17.930*	0.632	0.041	15.345*
EVAL→X <sub>13</sub>	0.844	0.038	22.484*	1.038	0.045	23.148*	0.873	0.043	20.284*
EVAL→X <sub>14</sub>	1.012	0.039	25.897*	1.109	0.044	25.301*	1.064	0.042	25.121*
EVAL→X <sub>15</sub>	0.821	0.038	21.546*	0.973	0.046	21.089*	0.873	0.044	19.794*

\* p-value is less than .001 and is significant.

<sup>a</sup> Not estimated when loading set to fixed value (i.e., 1.0)

**TABLE 41****Regression Weights – Attitude**

Path	Japan			South Korea			China		
	Weight	S. E.	C.R.	Weight	S. E.	C.R.	Weight	S. E.	C. R.
ATT→X <sub>16</sub>	1.000	– <sup>a</sup>	– <sup>a</sup>	1.000	– <sup>a</sup>	– <sup>a</sup>	1.000	– <sup>a</sup>	– <sup>a</sup>
ATT→X <sub>17</sub>	0.988	0.014	68.451*	0.969	0.017	55.600*	0.991	0.014	72.239*
ATT→X <sub>18</sub>	1.001	0.015	65.261*	0.980	0.018	55.292*	0.987	0.015	67.313*

\* p-value is less than .001 and is significant.

<sup>a</sup> Not estimated when loading set to fixed value (i.e., 1.0)

**TABLE 42****Regression Weights – Willingness to Buy**

Path	Japan			South Korea			China		
	Weight	S. E.	C. R.	Weight	S. E.	C. R.	Weight	S. E.	C. R.
WTB→X <sub>19</sub>	1.000	– <sup>a</sup>	– <sup>a</sup>	1.000	– <sup>a</sup>	– <sup>a</sup>	1.000	– <sup>a</sup>	– <sup>a</sup>
WTB→X <sub>20</sub>	1.284	0.091	14.050*	2.165	0.183	11.839*	1.511	0.100	15.055*
WTB→X <sub>21</sub>	1.331	0.089	14.974*	2.473	0.201	12.324*	1.541	0.099	15.574*
WTB→X <sub>22</sub>	1.662	0.108	15.457*	2.862	0.226	12.648*	1.908	0.115	16.621*
WTB→X <sub>23</sub>	1.599	0.103	15.517*	2.723	0.216	12.605*	1.096	0.114	16.774*
WTB→X <sub>24</sub>	1.145	0.103	11.104*	1.750	0.171	10.204*	1.253	0.099	12.707*

\* p-value is less than .001 and is significant.

<sup>a</sup> Not estimated when loading set to fixed value (i.e., 1.0)

**TABLE 43****Regression Weights – Animosity**

Path	Japan			South Korea			China		
	Weight	S. E.	C. R.	Weight	S. E.	C. R.	Weight	S. E.	C. R.
ANI→GA	1.147	0.058	19.789*	1.272	0.060	21.224*	1.309	0.063	20.702*
GA→X <sub>25</sub>	1.000	— <sup>a</sup>	— <sup>a</sup>	1.000	— <sup>a</sup>	— <sup>a</sup>	1.000	— <sup>a</sup>	— <sup>a</sup>
GA→X <sub>26</sub>	0.982	0.052	18.732*	1.030	0.049	21.233*	1.141	0.055	20.738*
GA→X <sub>27</sub>	0.787	0.051	15.569*	0.759	0.043	17.769*	0.860	0.045	19.252*
ANI→EA	0.643	0.055	11.784*	0.821	0.057	14.392*	0.906	0.063	14.270*
EA→X <sub>28</sub>	1.000	— <sup>a</sup>	— <sup>a</sup>	1.000	— <sup>a</sup>	— <sup>a</sup>	1.000	— <sup>a</sup>	— <sup>a</sup>
EA→X <sub>29</sub>	1.303	0.108	12.045*	0.995	0.072	13.806*	1.033	0.073	14.204*
EA→X <sub>30</sub>	1.694	0.122	13.887*	1.325	0.077	17.099*	1.394	0.083	16.731*
EA→X <sub>31</sub>	1.208	0.099	12.202*	0.848	0.062	13.761*	1.016	0.070	14.583*
EA→X <sub>32</sub>	1.329	0.097	13.660*	1.143	0.068	16.928*	1.283	0.074	17.394*

\* p-value is less than .001 and is significant;

<sup>a</sup> Not estimated when loading set to fixed value (i.e., 1.0)

**TABLE 44****Regression Weights – CET**

Path	Japan			South Korea			China		
	Weight	S. E.	C. R.	Weight	S. E.	C. R.	Weight	S. E.	C. R.
CET→X <sub>33</sub>	1.000	— <sup>a</sup>	— <sup>a</sup>	1.000	— <sup>a</sup>	— <sup>a</sup>	1.000	— <sup>a</sup>	— <sup>a</sup>
CET→X <sub>34</sub>	1.072	0.050	21.571*	1.072	0.050	21.609*	1.075	0.050	21.589*
CET→X <sub>35</sub>	0.991	0.048	20.803*	0.989	0.048	20.794*	0.990	0.048	20.746*
CET→X <sub>36</sub>	1.165	0.050	23.458*	1.161	0.050	23.437*	1.163	0.050	23.291*
CET→X <sub>37</sub>	1.124	0.050	22.384*	1.123	0.050	22.406*	1.123	0.050	22.340*
CET→X <sub>38</sub>	1.177	0.051	23.250*	1.178	0.051	23.310*	1.180	0.051	23.282*
CET→X <sub>39</sub>	1.162	0.049	23.959*	1.160	0.048	23.965*	1.163	0.049	23.932*
CET→X <sub>40</sub>	1.038	0.048	21.674*	1.038	0.048	21.712*	1.042	0.048	21.715*
CET→X <sub>41</sub>	1.022	0.048	21.144*	1.022	0.048	21.181*	1.023	0.048	21.131*
CET→X <sub>42</sub>	0.972	0.045	21.709*	0.970	0.045	21.717*	0.971	0.045	21.665*
CET→X <sub>43</sub>	1.045	0.048	21.833*	1.044	0.048	21.864*	1.047	0.048	21.848*
CET→X <sub>44</sub>	1.072	0.048	22.180*	1.072	0.048	22.214*	1.074	0.048	22.180*
CET→X <sub>45</sub>	1.041	0.046	22.621*	1.041	0.046	22.647*	1.041	0.046	22.592*
CET→X <sub>46</sub>	0.889	0.045	19.887*	0.888	0.045	19.898*	0.890	0.045	19.878*
CET→X <sub>47</sub>	0.868	0.043	20.109*	0.866	0.043	20.101*	0.864	0.044	19.794*
CET→X <sub>48</sub>	0.973	0.047	20.609*	0.971	0.047	20.603*	0.973	0.047	20.563*
CET→X <sub>49</sub>	1.165	0.049	23.710*	1.164	0.049	23.739*	1.165	0.049	23.673*

\* p-value is less than .001 and is significant.

<sup>a</sup> Not estimated when loading set to fixed value (i.e., 1.0)

The next step towards determining convergent validity is to examine the standardized factor loadings of each indicator represented in the measurement model. While some researchers prefer an ideal cut-off value at 0.70, a minimum factor loading value of 0.50 generally provides sufficient evidence of convergent validity (Hair *et al.* 2010). The standardized factor loadings for each individual scale in the model are displayed in Tables 45 through 50. The following variables are listed in order of presentation; country-of-origin image, product evaluation, attitude towards the product, willingness to buy the product, animosity and consumer ethnocentrism. Each of these tables also provides factor loading scores for all three Asian countries (i.e., Japan, South Korea and China).

**TABLE 45**  
**Standardized Factor Loadings – COO Image**

<b>Scale Item</b>	<b>Indicator</b>	<b>Factor</b>	<b>Japan</b>	<b>South Korea</b>	<b>China</b>
coo1_rc	$X_1$	CB	0.745*	0.699*	0.627*
coo2_rc	$X_2$	CB	0.945*	0.873*	0.875*
coo3_rc	$X_3$	CB	0.916*	0.891*	0.817*
coo4_rc	$X_4$	PA	0.860*	0.799*	0.814*
coo5_rc	$X_5$	PA	0.768*	0.711*	0.608*
coo6_rc	$X_6$	PA	0.887*	0.890*	0.909*
coo7_rc	$X_7$	DI	0.878*	0.868*	0.789*
coo8_rc	$X_8$	DI	0.810*	0.795*	0.754*
coo9_rc	$X_9$	DI	0.786*	0.906*	0.885*

\* Standardized factor loading values > 0.50.

**TABLE 46****Standardized Factor Loadings – Evaluation**

Scale Item	Indicator	Factor	Japan	South Korea	China
eval	$X_{10}$	EVAL	0.795*	0.771*	0.790*
eva2_rc	$X_{11}$	EVAL	0.589*	0.583*	0.613*
eva3	$X_{12}$	EVAL	0.572*	0.633*	0.548*
eva4	$X_{13}$	EVAL	0.762*	0.798*	0.711*
eva5	$X_{14}$	EVAL	0.856*	0.862*	0.844*
eva6	$X_{15}$	EVAL	0.740*	0.737*	0.689*

\* Standardized factor loading values > 0.50.

**TABLE 47****Standardized Factor Loadings – Attitude**

Scale Item	Indicator	Factor	Japan	South Korea	China
att1	$X_{16}$	ATT	0.969*	0.952*	0.968*
att2	$X_{17}$	ATT	0.957*	0.941*	0.965*
att3	$X_{18}$	ATT	0.949*	0.941*	0.954*

\* Standardized factor loading values > 0.50.

**TABLE 48****Standardized Factor Loadings – Willingness to Buy**

Scale Item	Indicator	Factor	Japan	South Korea	China
wtb1	$X_{19}$	WTB	0.527*	0.430	0.552*
wtb2_rc	$X_{20}$	WTB	0.702*	0.734*	0.723*
wtb3_rc	$X_{21}$	WTB	0.797*	0.832*	0.780*
wtb4_rc	$X_{22}$	WTB	0.866*	0.909*	0.874*
wtb5_rc	$X_{23}$	WTB	0.871*	0.901*	0.897*
wtb6_rc	$X_{24}$	WTB	0.487	0.518*	0.555*

\* Standardized factor loading values > 0.50.

**TABLE 49****Standardized Factor Loadings – Animosity**

Scale Item	Indicator	Factor	Japan	South Korea	China
ani1	$X_{25}$	GA	0.760*	0.780*	0.765*
ani7	$X_{26}$	GA	0.740*	0.791*	0.786*
ani8_rc	$X_{27}$	GA	0.607*	0.652*	0.710*
ani2	$X_{28}$	EA	0.524*	0.624*	0.608*
ani3	$X_{29}$	EA	0.612*	0.597*	0.647*
ani4	$X_{30}$	EA	0.838*	0.818*	0.838*
ani5	$X_{31}$	EA	0.624*	0.603*	0.664*
ani6	$X_{32}$	EA	0.732*	0.792*	0.802*

\* Standardized factor loading values > 0.50.

**TABLE 50****Standardized Factor Loadings – CET**

Scale Item	Indicator	Factor	Japan	South Korea	China
cet01	$X_{33}$	CET	0.700*	0.701*	0.700*
cet02	$X_{34}$	CET	0.782*	0.783*	0.784*
cet03	$X_{35}$	CET	0.758*	0.757*	0.757*
cet04	$X_{36}$	CET	0.858*	0.856*	0.856*
cet05	$X_{37}$	CET	0.817*	0.817*	0.816*
cet06	$X_{38}$	CET	0.849*	0.850*	0.851*
cet07	$X_{39}$	CET	0.878*	0.877*	0.878*
cet08	$X_{40}$	CET	0.790*	0.791*	0.793*
cet09	$X_{41}$	CET	0.764*	0.764*	0.764*
cet10	$X_{42}$	CET	0.792*	0.792*	0.791*
cet11	$X_{43}$	CET	0.796*	0.797*	0.798*
cet12	$X_{44}$	CET	0.810*	0.810*	0.811*
cet13	$X_{45}$	CET	0.823*	0.824*	0.823*
cet14	$X_{46}$	CET	0.724*	0.723*	0.724*
cet15	$X_{47}$	CET	0.732*	0.731*	0.729*
cet16	$X_{48}$	CET	0.751*	0.750*	0.750*
cet17	$X_{49}$	CET	0.868*	0.868*	0.867*

\* Standardized factor loading values > 0.50.

An inspection of the standardized factor loading scores indicates that nearly all loadings across the three models exceed the 0.50 threshold, thus indicating an acceptable degree of convergent validity. Furthermore, many of the loadings even passed the more rigorous test of exceeding a minimum value of 0.70, which means that they exhibit a high degree of convergent validity and more variance in the measures is attributable to explained variance rather than error variance (Hair *et al.* 2010). There are two loadings with regards to the willingness to buy (WTB) construct that did not meet the minimum requirement for at least one of the three models. The path estimate from the WTB construct to its indicator,  $X_{19}$  scored at 0.430 for the South Korean model; however the standardized loading estimates for the same path in the other two country models exceeded the 0.50 cut-off value. The Japanese model contains a single factor loading that is indicative of less-than-adequate convergent validity for the WTB factor. Its path to  $X_{24}$  provided an estimate of 0.487, which is just slightly below the cut-off score of 0.50 for sufficient convergent validity. Once again, the same path contains adequate standardized loading values for the other two country models.

Even though the standardized factor loadings provided strong support for convergent validity, two additional assessments are conducted to provide further evidence. The average variance extracted (AVE) is the average of how much variation in a scale is explained by the latent variable and is computed as:

$$AVE = \frac{\sum_{i=1}^n L_i^2}{n}$$

where  $L_i$  is the standardized factor loading and  $i$  is the number of items for  $n$  items (Hair *et al.* 2010). Construct reliability (CR) uses a similar formula, but takes into account the error variance for the construct and is computed as:

$$CR = \frac{\left( \sum_{i=1}^n L_i \right)^2}{\left( \sum_{i=1}^n L_i \right)^2 + \left( \sum_{i=1}^n e_i \right)}$$

where  $L_i$  is the factor loadings and  $e_i$  is the error variance term for the construct (Hair *et al.* 2010). Table 51 provides a report of both AVE and CR measures for all six constructs in the model.

**TABLE 51**

**Average Variance Extracted and Construct Reliability**

	<b>Japan Model</b>		<b>South Korea Model</b>		<b>China Model</b>	
<b>Variable</b>	<b>AVE</b>	<b>CR</b>	<b>AVE</b>	<b>CR</b>	<b>AVE</b>	<b>CR</b>
ATT	0.918*	0.936**	0.892*	0.911**	0.926*	0.929 **
EVAL	0.528*	0.740**	0.543*	0.737**	0.499	0.670**
COO	0.716*	0.910**	0.687*	0.904**	0.629*	0.851**
ANI	0.471	0.716**	0.492	0.747**	0.535*	0.736**
CET	0.632*	0.893**	0.632*	0.885**	0.632*	0.893**
WTB	0.525*	0.655**	0.554*	0.668**	0.553*	0.623**

\* AVE value > 0.50.

\*\* CR value > 0.60.

An inspection of the AVE scores indicates that nearly all loadings across the three models exceed the 0.50 threshold and that each construct surpassed this threshold within at least one or more country models, thus indicating an acceptable degree of convergent validity. For the CR analysis, all constructs exceeded the 0.70 cut-off value, thus providing substantial evidence of convergent validity as well.



## **Discriminant Validity**

Discriminant validity refers to the degree in which a construct being measured in the study is not similarly measured under a different construct and is therefore unique from other constructs. To provide evidence of this type of validity, researchers typically conduct a comparison of squared values of the estimated correlations between the constructs and the average variance extracted (AVE) from each construct. If the variable's AVE value is higher than the square of the estimated correlation between it and another variable, then there is evidence to support an acceptable degree of discriminant validity between these variables. The CFA model was respecified by setting the variances of all six variables to a value of 1.0. Each of the path parameters between the constructs and their indicators were not set and were estimated. Tables 52 through 54 provide matrices of the squared values of the estimated correlations between each variable pair and the AVE scores along the diagonal of each matrix.

**TABLE 52**

### **Discriminant Validity Matrix - Japan**

	<b>ANI</b>	<b>ATT</b>	<b>CET</b>	<b>COO</b>	<b>EVAL</b>	<b>WTB</b>
<b>ANI</b>	<b>0.471</b>					
<b>ATT</b>	0.304	<b>0.918</b>				
<b>CET</b>	0.207	0.207	<b>0.632</b>			
<b>COO</b>	0.549	0.475	0.181	<b>0.716</b>		
<b>EVAL</b>	0.286	0.590	0.106	0.475	<b>0.528</b>	
<b>WTB</b>	0.388	0.428	0.312	0.328	0.342	<b>0.525</b>

**TABLE 53****Discriminant Validity Matrix – South Korea**

	<b>ANI</b>	<b>ATT</b>	<b>CET</b>	<b>COO</b>	<b>EVAL</b>	<b>WTB</b>
<b>ANI</b>	<b>0.492</b>					
<b>ATT</b>	0.246	<b>0.892</b>				
<b>CET</b>	0.353	0.127	<b>0.632</b>			
<b>COO</b>	0.596	0.348	0.210	<b>0.687</b>		
<b>EVAL</b>	0.207	0.519	0.097	0.403	<b>0.543</b>	
<b>WTB</b>	0.372	0.342	0.279	0.298	0.312	<b>0.554</b>

**TABLE 54****Discriminant Validity Matrix - China**

	<b>ANI</b>	<b>ATT</b>	<b>CET</b>	<b>COO</b>	<b>EVAL</b>	<b>WTB</b>
<b>ANI</b>	<b>0.535</b>					
<b>ATT</b>	0.329	<b>0.926</b>				
<b>CET</b>	0.300	0.069	<b>0.632</b>			
<b>COO</b>	0.661	0.346	0.216	<b>0.629</b>		
<b>EVAL</b>	0.252	0.601	0.043	0.428	<b>0.499</b>	
<b>WTB</b>	0.415	0.456	0.216	0.410	0.360	<b>0.553</b>

The overall results from comparing AVE estimates to their corresponding inter-construct squared correlation estimates were indicative of discriminant validity among these variables. Despite these favorable outcomes, there are two potential issues that are worth noting from the analysis. The squared correlation estimates between the attitude and evaluation constructs were higher than the average variances extracted for evaluation across two models (Japan and China), but were lower than the AVE score for the attitude variable across all three models. A second pair of constructs, COO image and animosity, also produced mixed results. While the AVE values for animosity were lower than the corresponding squared correlation estimates for all three models, the AVE estimate for COO image was higher than these estimates for the Japanese and South Korean models.

## Nomological Validity

The correlation among constructs should be grounded in and remain consistent with existing theoretical research. This consistency is generally referred to as nomological validity and can be determined by an assessment of the correlation values between constructs within the CFA model that has set the constructs' variance to 1.0 (Hair *et al.* 2010). The sign of these values are of particular interest to researchers and should be in sync with the direction of the relationships between these constructs within prior studies. Table 55 illustrates the correlation matrix for the six variables within all three country models (J = Japan, S = South Korea and C = China).

**TABLE 55**

### Construct Correlations Matrix

	ANI	ATT	CET	COO	EVAL	WTB
ANI	- - -					
ATT	-0.551 (J) -0.496 (S) -0.574 (C)	- - -				
CET	0.589 (J) 0.594 (S) 0.548 (C)	-0.455 (J) -0.356 (S) -0.262 (C)	- - -			
COO	-0.741 (J) -0.772 (S) -0.813 (C)	0.639 (J) 0.590 (S) 0.588 (C)	-0.426 (J) -0.458 (S) -0.465 (C)	- - -		
EVAL	-0.535 (J) -0.455 (S) -0.502 (C)	0.768 (J) 0.721 (S) 0.775 (C)	-0.362 (J) -0.312 (S) -0.207 (C)	0.689 (J) 0.635 (S) 0.654 (C)	- - -	
WTB	-0.623 (J) -0.610 (S) -0.644 (C)	0.654 (J) 0.585 (S) 0.675 (C)	-0.559 (J) -0.528 (S) -0.465 (C)	0.573 (J) 0.546 (S) 0.640 (C)	0.585 (J) 0.559 (S) 0.600 (C)	- - -

Since all three models are derived from a single data set where the same respondents provide feedback about all three countries, the construct correlation values are similar across all of the models. As expected, a consumer's animosity towards a country will negatively affect her evaluation of, attitude towards, and receptivity of products from that country. In contrast, this animosity variable is positively related to consumer ethnocentrism since those respondents who are ethnocentric have a general disdain towards foreign countries and their products. Those consumers with high CET will also be less likely to provide positive evaluation of, develop favorable attitudes towards or be willing to buy these foreign goods. The direct positive relationships between the other variables exhibit normalcy within the realm of marketing theory since positive evaluations of a product fosters favorable attitudes toward it and subsequently will lead to purchase intention.

In summary, the original measurement model has been modified to include a 2<sup>nd</sup> order factorial structure for two variables, country-of-origin image and animosity. The model modifications vastly improved the model fit statistics and have met the minimum acceptable levels of goodness-of-fit across several fit indices. Keeping in step with the decision rule imposed throughout this study, any evidence of positive test results within at least one of the three models provides support for its significance to this study. As a result, subsequent assessments provide evidence of acceptable levels of reliability and validity for the CFA model and conducting path analyses with its validated constructs should produce statistically robust findings.

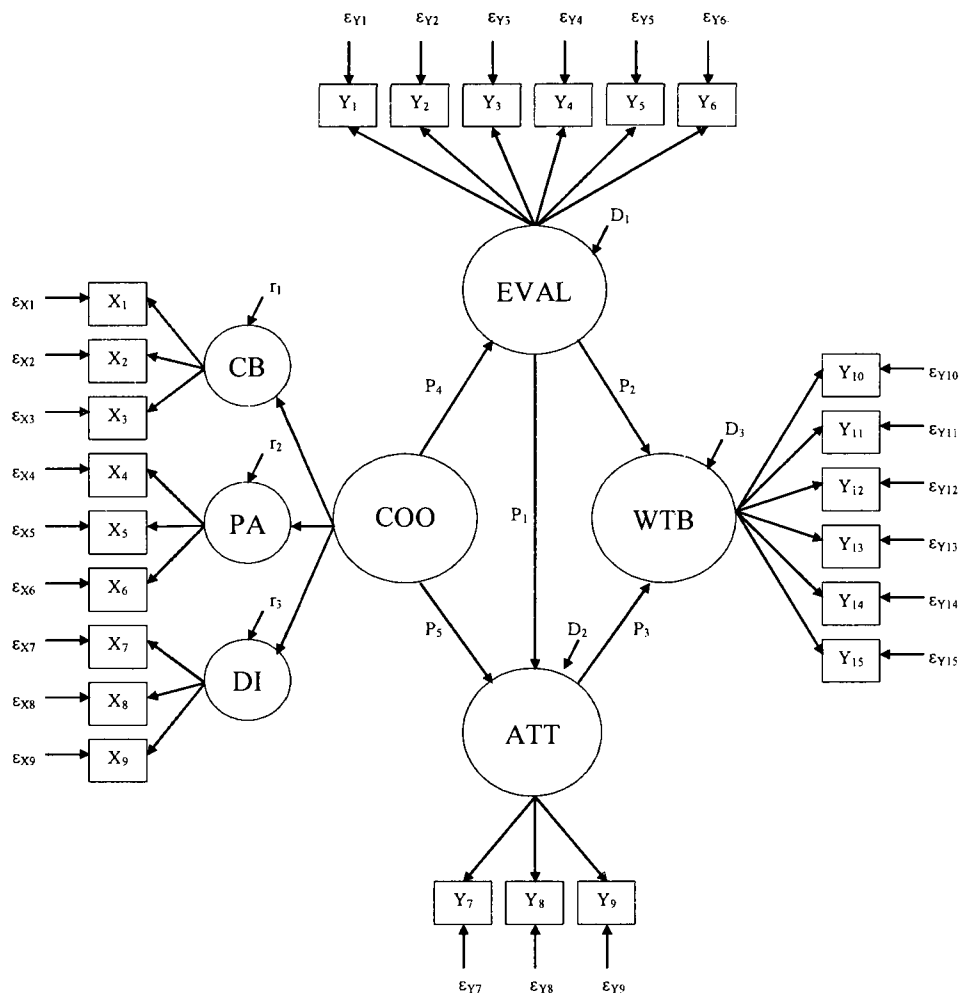
## STRUCTURAL ANALYSIS

The transition from a measurement model to a structural model is necessary in order to test the hypotheses in this study. This action is warranted by the acceptable goodness-of-fit measures demonstrated by the CFA model and the satisfactory results of various tests of construct reliability and validity. While some researchers assess both the measurement model and the structural model simultaneously, taking the two-step SEM approach proposed by Anderson and Gerbing (1988) has some advantages. First, it allows the researcher to test the measurement model's fit prior to assessing the structural model to alleviate the GIGO (garbage in, garbage out) dilemma. In other words, the statistical results of a structural model test are meaningless if the test was conducted with poor measures. A second related advantage of the two-step process is that "a one-step model provides only one key test of fit and validity" (Hair *et al.* 2010, p. 711) while additional model fit and validity statistics are provided by the two-step approach. This allows the researcher to determine if her statistical analysis issues are due to misguided theory or poor measurements (Blunch 2008).

Five hypotheses are proposed to address the main effects of the structural diagram and will be examined first. An assessment of the ten interaction effects will follow in the next section of this chapter. Figure 7 illustrates the structural model of main effects with the model respecification of country-of-origin image conducted in the CFA analysis. Based on the proposed theory in this dissertation, this model consists of one exogenous construct (country-of-origin image) and three endogenous constructs, namely the consumer's evaluation of, attitude towards and willingness to buy the foreign product.

The five path coefficients ( $P_1$  to  $P_5$ ) in the model directly relate to the five main effects hypotheses being tested.

**FIGURE 7**  
**Respecified Hybrid Model of Main Effects**



The revised hybrid model is used as a template for the three country models and is recursive with unidirectional causal effects and uncorrelated disturbances. The model is also identified with 244 degrees of freedom, 56 estimated parameters and 24 observed variables. One indicator among each set of scale items has been set to 1.0 to scale the

latent variables. As with the confirmatory factor analysis, maximum likelihood estimation is used for the SEM analysis of the structural model.

### Structural Model Validity

The analysis of these country models will focus initially upon the goodness-of-fit statistics and follow up with the investigation of the congruency between the path relationships and the theoretical proposals put forth in this study. Both absolute fit and incremental fit measures must be evaluated to accurately gauge the fit between the data and the model. A summary of key fit measures for each model are provided in Table 56 and demonstrates an acceptable degree of fit for all three models.

**TABLE 56**

#### Fit Statistics – Structural Model

Country	$\chi^2 (p)$	df	$\chi^2/df$	RMSEA	LO 90	HI 90	CFI	TLI
Japan	980.170 (0.000)	244	4.017	0.061	0.057	0.065	0.947	0.940
South Korea	886.785 (0.000)	244	3.648	0.057	0.053	0.062	0.951	0.945
China	1112.50 (0.000)	244	4.560	0.067	0.063	0.071	0.932	0.923

Due to the large sample size, the overall model  $\chi^2$  statistics for the three country models range in value from 886.785 to 1112.50, thus producing statistically significant p-values. The normed  $\chi^2$  measures, on the other hand, range from 3.648 to 4.560, which fall below the 5.0 cut-off value and indicate an acceptable degree of global fit (Hair *et al.* 2010). The RMSEA fit assessments remain significant, ranging from 0.057 to 0.061 and approaching values that indicate an excellent degree of model fit (Kline 1998). The incremental fit measures fared as well as the global fit measures across all three models. The CFI indexes range from 0.932 to 0.951, which surpass the 0.90 cut-off point to

demonstrate adequate model fit (Bentler 1990). As for the TLI fit statistic, all three values exceed the minimum score of 0.90 for adequate fit (Bentler and Bonett 1988) and range from 0.923 to 0.945. In summary, there is sufficient evidence to conclude that the structural model is a reasonable approximation of the data. Furthermore, the fit statistics for the structural model are a slight improvement over the measurement model and provide additional support in validating this study's proposed theoretical model.

The next steps consist of the direct comparison of standardized factor loadings and construct reliabilities between the CFA model and the structural model (Hair *et al.* 2010). Tables 57 through 60 provide a summary of the standardized factor loadings across all three country models.

**TABLE 57**

**Comparison of Standardized Factor Loadings – COO Image**

<b>Indicator</b>	<b>Structural Model</b>			<b>Measurement Model</b>		
	<b>Japan</b>	<b>S. Korea</b>	<b>China</b>	<b>Japan</b>	<b>S. Korea</b>	<b>China</b>
coo1_rc	0.746*	0.701*	0.631*	0.745*	0.699*	0.627*
coo2_rc	0.944*	0.871*	0.867*	0.945*	0.873*	0.875*
coo3_rc	0.917*	0.892*	0.822*	0.916*	0.891*	0.817*
coo4_rc	0.858*	0.793*	0.806*	0.860*	0.799*	0.814*
coo5_rc	0.773*	0.712*	0.610*	0.768*	0.711*	0.608*
coo6_rc	0.866*	0.896*	0.918*	0.887*	0.890*	0.909*
coo7_rc	0.882*	0.864*	0.783*	0.878*	0.868*	0.789*
coo8_rc	0.808*	0.799*	0.763*	0.810*	0.795*	0.754*
coo9_rc	0.783*	0.907*	0.883*	0.786*	0.906*	0.885*

\* Standardized factor loading values > 0.50.



**TABLE 58****Comparison of Standardized Factor Loadings – Evaluation**

<b>Indicator</b>	<b>Structural Model</b>			<b>Measurement Model</b>		
	<b>Japan</b>	<b>S. Korea</b>	<b>China</b>	<b>Japan</b>	<b>S. Korea</b>	<b>China</b>
eva1	0.794*	0.771*	0.787*	0.795*	0.771*	0.790*
eva2_rc	0.592*	0.585*	0.614*	0.589*	0.583*	0.613*
eva3	0.571*	0.631*	0.548*	0.572*	0.633*	0.548*
eva4	0.762*	0.797*	0.712*	0.762*	0.798*	0.711*
eva5	0.855*	0.860*	0.841*	0.856*	0.862*	0.844*
eva6	0.740*	0.737*	0.691*	0.740*	0.737*	0.689*

\* Standardized factor loading values > 0.50.

**TABLE 59****Comparison of Standardized Factor Loadings – Attitude**

<b>Indicator</b>	<b>Structural Model</b>			<b>Measurement Model</b>		
	<b>Japan</b>	<b>S. Korea</b>	<b>China</b>	<b>Japan</b>	<b>S. Korea</b>	<b>China</b>
att1	0.969*	0.952*	0.968*	0.969*	0.952*	0.968*
att2	0.957*	0.941*	0.965*	0.957*	0.941*	0.965*
att3	0.949*	0.940*	0.954*	0.949*	0.941*	0.954*

\* Standardized factor loading values > 0.50.

**TABLE 60****Comparison of Standardized Factor Loadings – Willingness to Buy**

<b>Indicator</b>	<b>Structural Model</b>			<b>Measurement Model</b>		
	<b>Japan</b>	<b>S. Korea</b>	<b>China</b>	<b>Japan</b>	<b>S. Korea</b>	<b>China</b>
wtb1	0.531*	0.431	0.554*	0.527*	0.430	0.552*
wtb2_rc	0.699*	0.730*	0.721*	0.702*	0.734*	0.723*
wtb3_rc	0.796*	0.834	0.778*	0.797*	0.832*	0.780*
wtb4_rc	0.867*	0.911*	0.877*	0.866*	0.909*	0.874*
wtb5_rc	0.875*	0.901*	0.899*	0.871*	0.901*	0.897*
wtb6_rc	0.474	0.510*	0.543*	0.487	0.518*	0.555*

\* Standardized factor loading values > 0.50.

An inspection of the standardized factor loading values indicates miniscule differences between the measurement model and structural model, thus providing support for the psychometric stability of the measured indicator variables. To further substantiate the claim of parameter stability, Table 61 illustrates the construct reliabilities for both the structural and measurement models across all three countries. Once again, the results reveal practically no change in the values and provide additional support for convergent validity as well as variable stability.

**TABLE 61**  
**Comparison of Construct Reliabilities**

Variable	Japan		South Korea		China	
	Structural	CFA	Structural	CFA	Structural	CFA
ATT	0.935*	0.936*	0.921*	0.911*	0.929*	0.929 *
EVAL	0.740*	0.740*	0.756*	0.737*	0.670*	0.670*
COO	0.910*	0.910*	0.905*	0.904*	0.851*	0.851*
WTB	0.631*	0.655*	0.655*	0.668*	0.621*	0.623*

\* CR value > 0.60.

Next the estimated standardized and unstandardized structural path estimates are examined confirm the significance and direction of the hypothesized paths. Tables 62 through 64 provide the structural parameter estimates for each of the country models. In summary, all five path estimates are statistically significant at the 0.001 level with the exception of the path from COO image to attitude within the Chinese model. Its p-value is 0.018 and is therefore significant at the 0.05 level. Additionally, all of the path estimates consist of positive values, providing statistical support for the direct, positive main effects proposed by the first five hypotheses in this study.

**TABLE 62****Structural Parameter Estimates – Japan**

<b>Structural Relationship</b>	<b>Unstandardized Parameter Est.</b>	<b>S. E.</b>	<b>C. R.</b>	<b>Standardized Parameter Est.</b>
<b>H<sub>1a</sub></b> : EVAL → ATT	0.722	0.055	13.202***	0.635
<b>H<sub>1b</sub></b> : EVAL → WTB	0.163	0.041	3.973***	0.217
<b>H<sub>1c</sub></b> : ATT → WTB	0.322	0.039	8.301***	0.488
<b>H<sub>2a</sub></b> : COO → EVAL	0.894	0.057	15.579***	0.692
<b>H<sub>2b</sub></b> : COO → ATT	0.283	0.074	3.817***	0.193

\* p-value is significant at the 0.05 level.

\*\* p-value is significant at the 0.01 level.

\*\*\* p-value is significant at the 0.001 level.

**TABLE 63****Structural Parameter Estimates – South Korea**

<b>Structural Relationship</b>	<b>Unstandardized Parameter Est.</b>	<b>S. E.</b>	<b>C. R.</b>	<b>Standardized Parameter Est.</b>
<b>H<sub>1a</sub></b> : EVAL → ATT	0.719	0.057	12.528***	0.582
<b>H<sub>1b</sub></b> : EVAL → WTB	0.173	0.032	5.461***	0.300
<b>H<sub>1c</sub></b> : ATT → WTB	0.173	0.026	6.640***	0.370
<b>H<sub>2a</sub></b> : COO → EVAL	0.738	0.051	14.438***	0.651
<b>H<sub>2b</sub></b> : COO → ATT	0.300	0.067	4.463***	0.214

\* p-value is significant at the 0.05 level.

\*\* p-value is significant at the 0.01 level.

\*\*\* p-value is significant at the 0.001 level.

**TABLE 64****Structural Parameter Estimates – China**

<b>Structural Relationship</b>	<b>Unstandardized Parameter Est.</b>	<b>S. E.</b>	<b>C. R.</b>	<b>Standardized Parameter Est.</b>
<b>H<sub>1a</sub></b> : EVAL → ATT	0.837	0.061	13.708***	0.689
<b>H<sub>1b</sub></b> : EVAL → WTB	0.168	0.041	4.088***	0.225
<b>H<sub>1c</sub></b> : ATT → WTB	0.307	0.036	8.644***	0.501
<b>H<sub>2a</sub></b> : COO → EVAL	0.925	0.066	13.980***	0.682
<b>H<sub>2b</sub></b> : COO → ATT	0.209	0.088	2.365*	0.127

\* p-value is significant at the 0.05 level.

\*\* p-value is significant at the 0.01 level.

\*\*\* p-value is significant at the 0.001 level.

The analysis of the structural model of main effects provides strong evidence of good model fit and validity. As a precaution, an assessment was conducted to identify patterns of large standardized residuals or large modification indices that may suggest the absence of paths that may improve the model's fit (Hair *et al.* 2010). No evidence of these patterns were found that could be supported on theoretical grounds and as a result, no modifications to the structural model were pursued.

## **MULTIGROUP ANALYSIS**

In this study, two moderators are proposed to have negative influences upon the five direct relationships illustrated in the structural model (Figure 4-5). An interaction (or moderating effect) is a result of the influence of a third variable “that affects the direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable” (Baron and Kenny 1986, p. 1174). As with any other statistical analysis, testing interactions in SEM consists of carefully administered steps. First, composite variables must be created for the moderators by averaging their scale items and the sample is subsequently divided into groups of high and low levels of the moderators under investigation. Two models are then specified and compared for significance of invariance by chi-square difference tests. The first model contains no constraints between the high and low groups of the moderating variable while the second model has fixed parameters that are identical for both groups. After the models are tested, the researcher provides results of the formal assessment of the hypotheses pertaining to these interaction effects. In short, multigroup analysis enables the researcher to assess

whether the proposed structural paths are invariant across different levels of the moderating variables.

Composite variables were created in the SPSS analytical software for consumer ethnocentrism and animosity by averaging the scale items for these constructs. While summing the scores to create composite variables is a common practice, the decision to use averages in this study was primarily based on the differences in the number of scale items across the constructs in the theoretical model. The main advantage of using average-based variables rather than summated variables lies in the ability to make comparisons across constructs with varying numbers of indicators.

The next step of the multigroup analysis process is to segregate the sample into groups that vary across the levels of the moderator variables. A median split is often utilized in which respondents are grouped as being low or high on the interaction. For example, when dividing her data set according to high and low levels of animosity (items measured by seven-point scales), Klein (2002) grouped subjects that scored less than a value of 4 as the low animosity group and those scoring above 4 as the high animosity group. The main disadvantage of this group division method is that it accounts for those respondents who were practically ambivalent with regards to their levels of animosity. Provided that the data set is large enough, a better method is to conduct a three-way split in which the middle, ambivalent group is not added into the high or low group sets. To conduct this group splitting technique with a data set of 800 respondents, divisions were arbitrarily chosen to produce groups that represent differing levels of the moderating variables. The middle 300 respondents were regarded as the 'ambivalent group' and removed from further consideration, resulting in two sets of 250 respondents each to

represent the groups exhibiting high and low levels of the moderators, consumer ethnocentrism and animosity. This split allows for better representation of interaction terms while maintaining acceptably large sample sizes for the multigroup SEM analysis.

To test the ten interaction hypotheses (five relating to consumer ethnocentrism and five concerning animosity), two models are compared for significance of model fit differences for each hypothesis. The first model has no constraints placed upon the high and low groups, thus allowing the parameters to be free for estimation. The second model consists of constraining the hypothesized path as an equal parameter across both groups. The proposed moderating effects of consumer ethnocentrism upon each of the five main effects paths of the structural model are evaluated in the following tables. Each table provides the outcome of the two-model comparison in terms of fit indices and chi-square difference tests for each direct path in the hypothesized as well as for each Asian country investigated.

Table 65 summarizes the results pertaining to the effects of consumer ethnocentrism upon the relationship between country-of-origin image and the consumer's evaluation of the foreign product.

**TABLE 65**

**Fit Indices and  $\chi^2$  Difference Tests for CET: COO  $\rightarrow$  EVAL**

Model	$\chi^2$	df	$\chi^2/df$	RMSEA	CFI	TLI	$\Delta\chi^2$	$\Delta df$
Japan 1	1090.556	488	2.235	0.050	0.928	0.918	-	-
Japan 2	1095.134	489	2.240	0.050	0.927	0.918	4.578*	1
S. Korea 1	1063.573	488	2.179	0.049	0.930	0.921	-	-
S. Korea 2	1063.769	489	2.175	0.049	0.930	0.921	0.196	1
China 1	1130.883	488	2.317	0.051	0.921	0.910	-	-
China 2	1131.729	489	2.134	0.051	0.921	0.910	0.846	1

\* p-value is significant at the 0.05 level.

\*\* p-value is significant at the 0.01 level.

\*\*\* p-value is significant at the 0.001 level.

The constrained and unconstrained models were compared across all three Asian countries and exhibited acceptable fit measures for CMIN/*df* (i.e.,  $\chi^2/df$ ), RMSEA, CFI and TLI fit indices, thus indicating overall good model fit. The chi-square difference test for significance between the free model and the constrained model was conducted for each country. For tests concerning one degree of freedom, the chi-square cut-off values are 3.84 (at the 0.05 level), 6.64 (at the 0.01 level) and 10.83 (at the 0.001 level). The test provided evidence that there is no statistical difference between the two models for two of the countries, South Korea and China. In other words, constraining the path in the second model to be equal across groups did not produce worst fit when compared to the fit of the free model.

In contrast, the chi-square difference test produced a value that is significant at the 0.05 level for Japan. The standardized path estimate (i.e., the standardized regression weights from AMOS output) for the unconstrained model is 0.697 for consumers with high levels of CET and 0.677 for those exhibiting low levels of CET, thus indicating that the strength of the relationship between COO image and product evaluation is greater at high levels of consumer ethnocentrism; therefore the results from the Japanese analysis provide partial support for hypothesis H<sub>3a</sub>.

The model fit indices and chi-square difference test for the effect of CET upon the relationship between COO image and attitude towards the product is provided in Table 66.

**TABLE 66****Fit Indices and  $\chi^2$  Difference Tests for CET: COO  $\rightarrow$  ATT**

Model	$\chi^2$	df	$\chi^2/df$	RMSEA	CFI	TLI	$\Delta\chi^2$	$\Delta df$
Japan 1	1090.556	488	2.235	0.050	0.928	0.918	-	-
Japan 2	1091.238	489	2.232	0.050	0.928	0.919	0.682	1
S. Korea 1	1063.573	488	2.179	0.049	0.930	0.921	-	-
S. Korea 2	1063.596	489	2.175	0.049	0.930	0.921	0.023	1
China 1	1130.883	488	2.317	0.051	0.921	0.910	-	-
China 2	1133.291	489	2.318	0.051	0.920	0.910	2.408	1

\* p-value is significant at the 0.05 level.

\* p-value is significant at the 0.01 level.

\*\*\* p-value is significant at the 0.001 level.

While the fit indices indicate acceptable ranges of model fit, the chi-square difference test provided insignificant results for all three countries. These results indicate that CET does not moderate the strength of the relationship between country-of-origin image and the consumer's attitude towards the foreign product, thus Hypothesis H<sub>3c</sub> is not supported.

Next the effects of CET upon the relationship between the consumer's evaluation of the product and attitude towards the product are analyzed. Table 67 provides the model fit and chi-square difference test results.

**TABLE 67****Fit Indices and  $\chi^2$  Difference Tests for CET: EVAL  $\rightarrow$  ATT**

Model	$\chi^2$	df	$\chi^2/df$	RMSEA	CFI	TLI	$\Delta\chi^2$	$\Delta df$
Japan 1	1090.556	488	2.235	0.050	0.928	0.918	-	-
Japan 2	1091.132	489	2.231	0.050	0.928	0.919	0.576	1
S. Korea 1	1063.573	488	2.179	0.049	0.930	0.921	-	-
S. Korea 2	1063.857	489	2.176	0.049	0.930	0.921	0.284	1
China 1	1130.883	488	2.317	0.051	0.921	0.910	-	-
China 2	1133.830	489	2.319	0.051	0.920	0.910	2.947	1

\* p-value is significant at the 0.05 level.

\*\* p-value is significant at the 0.01 level.

\*\*\* p-value is significant at the 0.001 level.



All country models exhibited acceptable fit measures for the absolute and incremental fit indices, thus indicating overall good model fit. Furthermore, the chi-square difference test for significance between the free model and the constrained model revealed that there is no statistical difference between the two models for all three countries. In summary, there was no evidence to support that CET has a moderating effect upon the relationship between product evaluation and the consumer's attitude towards the foreign product, thus Hypothesis H<sub>3c</sub> is not supported.

Table 68 illustrates the fit indices and chi-square difference tests to assess the effects of consumer ethnocentrism upon the relationship between product evaluation and willingness to buy the product.

**TABLE 68**

**Fit Indices and  $\chi^2$  Difference Tests for CET: EVAL  $\rightarrow$  WTB**

Model	$\chi^2$	df	$\chi^2/df$	RMSEA	CFI	TLI	$\Delta\chi^2$	$\Delta df$
Japan 1	1090.556	488	2.235	0.050	0.928	0.918	-	-
Japan 2	1090.596	489	2.230	0.050	0.928	0.919	0.040	1
S. Korea 1	1063.573	488	2.179	0.049	0.930	0.921	-	-
S. Korea 2	1063.676	489	2.175	0.049	0.930	0.921	0.103	1
China 1	1130.883	488	2.317	0.051	0.921	0.910	-	-
China 2	1138.297	489	2.328	0.052	0.920	0.909	7.414**	1

\* p-value is significant at the 0.05 level.

\*\* p-value is significant at the 0.01 level.

\*\*\* p-value is significant at the 0.001 level.

All country models demonstrated acceptable absolute and incremental fit measures, thus indicating overall good model fit. While no significance was detected from the chi-square difference test for the Japanese and South Korean models, the comparison of the Chinese models resulted in statistical significance at the 0.01 level. This finding partially supports Hypothesis H<sub>3d</sub>, which states that CET has a moderating effect upon the relationship between the consumer's evaluation of the product and her willingness to buy it. The

standardized path estimate for the unconstrained model is 0.423 for consumers with high levels of CET and 0.146 for those exhibiting low levels of CET, thus indicating that the strength of the relationship between product evaluation and willingness to buy is greater at high levels of consumer ethnocentrism.

Table 69 examines the potential effects of CET upon the relationship between the consumer's attitude towards the product and her willingness to buy the product.

**TABLE 69**  
**Fit Indices and  $\chi^2$  Difference Tests for CET: ATT  $\rightarrow$  WTB**

Model	$\chi^2$	df	$\chi^2/df$	RMSEA	CFI	TLI	$\Delta\chi^2$	$\Delta df$
Japan 1	1090.556	488	2.235	0.050	0.928	0.918	-	-
Japan 2	1103.847	489	2.257	0.050	0.926	0.917	13.291**	1
S. Korea 1	1063.573	488	2.179	0.049	0.930	0.921	-	-
S. Korea 2	1065.896	489	2.180	0.049	0.930	0.921	2.323	1
China 1	1130.883	488	2.317	0.051	0.921	0.910	-	-
China 2	1131.588	489	2.314	0.051	0.921	0.910	0.705	1

\* p-value is significant at the 0.05 level.

\*\* p-value is significant at the 0.01 level.

\*\*\* p-value is significant at the 0.001 level.

As with the other moderation tests thus far, acceptable model fit for all three countries is supported. The chi-square difference test resulted in insignificant values for the South Korean and Chinese tests, but the Japanese test was found to significant at the 0.01 level. The standardized regression weight for the unconstrained model is 0.099 for consumers with low levels of CET and 0.428 for those with high levels of CET, which suggests that the strength of the relationship between consumer attitude and willingness to buy is greater at high levels of consumer ethnocentrism. Given these results from all three country analyses, Hypothesis H<sub>3e</sub> is partially supported.

A similar set of tests were conducted for the multigroup analysis of the animosity variable to assess its moderating effects upon the five main effects found within the structural model. Table 70 illustrates the outcome of these tests for animosity's effect upon the relationship between COO image and product evaluation.

**TABLE 70**

**Fit Indices and  $\chi^2$  Difference Tests for Animosity: COO → EVAL**

Model	$\chi^2$	df	$\chi^2/df$	RMSEA	CFI	TLI	$\Delta\chi^2$	$\Delta df$
Japan 1	1012.080	488	2.074	0.046	0.936	0.927	-	-
Japan 2	1026.924	489	2.100	0.047	0.934	0.925	14.844***	1
S. Korea 1	1031.127	488	2.113	0.047	0.935	0.926	-	-
S. Korea 2	1031.162	489	2.109	0.047	0.935	0.926	0.035	1
China 1	1140.212	488	2.337	0.052	0.909	0.897	-	-
China 2	1140.290	489	2.332	0.052	0.909	0.897	0.078	1

\* p-value is significant at the 0.05 level.

\*\* p-value is significant at the 0.01 level.

\*\*\* p-value is significant at the 0.001 level.

The absolute and incremental fit measures suggest appropriate model fit for all three countries. The chi-square difference tests found significance for only one country, Japan, at the 0.001 level. The standardized regression estimate for the unconstrained model is 0.478 for consumers with low levels of animosity and 1.046 for those with high levels of animosity, which suggests that the strength of the relationship between COO image and product evaluation is greater at high levels of consumer animosity. Given the results from all three country analyses, Hypothesis H<sub>3a</sub> is partially supported.

Table 71 provides the model fit statistics and chi-square difference test results for animosity's effect upon the relationship between COO image and the consumer's attitude towards the foreign product.

**TABLE 71****Fit Indices and  $\chi^2$  Difference Tests for Animosity: COO  $\rightarrow$  ATT**

Model	$\chi^2$	df	$\chi^2/df$	RMSEA	CFI	TLI	$\Delta\chi^2$	$\Delta df$
Japan 1	1012.080	488	2.074	0.046	0.936	0.927	-	-
Japan 2	1013.458	489	2.073	0.046	0.936	0.927	1.378	1
S. Korea 1	1031.127	488	2.113	0.047	0.935	0.926	-	-
S. Korea 2	1031.426	489	2.109	0.047	0.935	0.926	0.299	1
China 1	1140.212	488	2.337	0.052	0.909	0.897	-	-
China 2	1140.535	489	2.332	0.052	0.909	0.897	0.323	1

\* p-value is significant at the 0.05 level.

\*\* p-value is significant at the 0.01 level.

\*\*\* p-value is significant at the 0.001 level.

Although these values show adequate ranges of model fit, the chi-square values for the three countries are nonsignificant. Hypothesis H<sub>4b</sub> is not supported, thus the level of animosity the consumer has does not affect the magnitude of the effect of country-of-origin image upon the consumer's attitude towards the foreign product.

The multigroup test statistics for animosity's effect upon the relationship between evaluation and attitude is provided in Table 72.

**TABLE 72****Fit Indices and  $\chi^2$  Difference Tests for Animosity: EVAL  $\rightarrow$  ATT**

Model	$\chi^2$	df	$\chi^2/df$	RMSEA	CFI	TLI	$\Delta\chi^2$	$\Delta df$
Japan 1	1012.080	488	2.074	0.046	0.936	0.927	-	-
Japan 2	1012.774	489	2.071	0.046	0.936	0.927	0.694	1
S. Korea 1	1031.127	488	2.113	0.047	0.935	0.926	-	-
S. Korea 2	1031.325	488	2.109	0.047	0.935	0.926	0.198	1
China 1	1140.212	488	2.337	0.052	0.909	0.897	-	-
China 2	1140.213	489	2.332	0.052	0.909	0.897	0.001	1

\* p-value is significant at the 0.05 level.

\*\* p-value is significant at the 0.01 level.

\*\*\* p-value is significant at the 0.001 level.

Once again, fit statistics show an acceptable level of absolute and incremental model fit, but the chi-square test indicates a lack of difference between the constrained and

unconstrained models for all three countries; therefore Hypothesis H<sub>4c</sub> is not supported by the data.

Table 73 provides the test results regarding the moderating effects of consumer animosity upon the relationship between her evaluation of the product and her willingness to buy the product.

**TABLE 73**

**Fit Indices and  $\chi^2$  Difference Tests for Animosity: EVAL  $\rightarrow$  WTB**

Model	$\chi^2$	df	$\chi^2/df$	RMSEA	CFI	TLI	$\Delta\chi^2$	$\Delta df$
Japan 1	1012.080	488	2.074	0.046	0.936	0.927	-	-
Japan 2	1016.096	489	2.078	0.047	0.935	0.927	4.016*	1
S. Korea 1	1031.127	488	2.113	0.047	0.935	0.926	-	-
S. Korea 2	1031.605	489	2.110	0.047	0.935	0.926	0.478	1
China 1	1140.212	488	2.337	0.052	0.909	0.897	-	-
China 2	1140.448	489	2.332	0.052	0.909	0.897	0.326	1

\* p-value is significant at the 0.05 level.

\*\* p-value is significant at the 0.01 level.

\*\*\* p-value is significant at the 0.001 level.

All country models expressed acceptable absolute and incremental fit measures, thus indicating overall good model fit. While no significance was detected from the chi-square difference test for the Chinese and South Korean models, the Japanese test provides a statistical significant value at the 0.01 level. This finding partially supports Hypothesis H<sub>4d</sub>, which states that animosity has a moderating effect upon the relationship between the consumer's evaluation of the product and her willingness to buy it. The standardized regression weight for the unconstrained model is 0.373 for consumers with high levels of animosity and 0.094 for those exhibiting low levels of animosity, thus indicating that the strength of the relationship between product evaluation and willingness to buy is greater at high levels of consumer animosity.

The last set of results from the multigroup analysis is provided in Table 74 and focuses on animosity's effect upon the relationship between the consumer's attitude towards the foreign product and her willingness to buy that product.

**TABLE 74**  
**Fit Indices and  $\chi^2$  Difference Tests for Animosity: ATT  $\rightarrow$  WTB**

Model	$\chi^2$	df	$\chi^2/df$	RMSEA	CFI	TLI	$\Delta\chi^2$	$\Delta df$
Japan 1	1012.080	488	2.074	0.046	0.936	0.927	-	-
Japan 2	1029.930	489	2.106	0.047	0.934	0.925	17.840***	1
S. Korea 1	1031.127	488	2.113	0.047	0.935	0.926	-	-
S. Korea 2	1040.971	489	2.129	0.048	0.934	0.925	9.844**	1
China 1	1140.212	488	2.337	0.052	0.909	0.897	-	-
China 2	1157.885	489	2.368	0.052	0.906	0.894	17.673***	1

\* p-value is significant at the 0.05 level.

\*\* p-value is significant at the 0.01 level.

\*\*\* p-value is significant at the 0.001 level.

The fit measures were found to be acceptable across all three countries. Similarly, the chi-square difference tests resulted in statistically significant results across all three countries, providing strong support for Hypothesis H<sub>4e</sub>. The chi-square values for both the Japanese and Chinese analyses are significant at the 0.001 level. The standardized path estimates for the unconstrained Japanese model are 0.165 for low animosity and 0.681 for high animosity. The Chinese model exhibited comparable standardized path estimates of 0.154 and 0.622 for low and high levels of animosity, respectively. The South Korean test produced a chi-square value that is significant at the 0.01 level. The standardized path estimates for the unconstrained South Korean model are 0.128 for low animosity and 0.459 for high animosity. The chi-square difference test results from all three countries unanimously suggest that high animosity increases the magnitude of the

effect of consumer's attitude towards the foreign product on her willingness to buy the product.

In summary, a total of 15 hypotheses were tested with structural equation modeling methods. Once an appropriate model was derived from confirmatory factor analysis and model respecification, structural analysis was conducted to test the five main effects hypotheses. All five hypotheses were supported by the data and demonstrated adequate levels of model fit. Multigroup analysis was conducted next to substantiate the claim that consumer ethnocentrism and animosity moderate the relationships proposed by the five main effects hypotheses. Ten interaction hypotheses were tested (five for each of the moderators) and resulted in varying levels of support for the interactions. For CET, three of the five hypotheses were partially supported (supported by at least one of the three country models) and the remaining two hypotheses were not supported. For animosity, one hypothesis was fully supported by all three country models, two were partially supported and the remaining two were not supported.

## **CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS**

### **INTRODUCTION**

Chapter 5 of this dissertation summarizes the study's findings, discusses the implications of these results, identifies the limitations of the study and provides suggestions for future research. As stated in the opening chapter, the goals of this study are three-fold. The first objective was to carry out a thorough investigation of the existing literature surrounding the identification of main determinants affecting consumers' perception of, attitude towards and willingness to buy foreign products. Upon the discovery of these determinants, the second objective was to create and test a main effects model that incorporated each stage of consumer analysis and subsequent purchase of foreign goods. Despite the fact that established scales were employed for all of the six variables in this study, various procedures were conducted to ensure the reliability and validity of the scales. Five hypotheses addressed these main effects and SEM analysis determined the significance and strength of the relationships among several determinants and the outcome variable, willingness to buy the foreign product.

The final goal of this study focused on determining and comparing the interaction effects of potential moderators upon the main effects model developed by the second objective. Two variables, consumer ethnocentrism and animosity, are posited to have interactive effects upon the relationships between the determinants and the outcome variable and are tested through multigroup analyses in SEM. The implications of the main effects and interaction results are examined from both an academic and managerial viewpoint and future research directions are derived from these limitations. To provide an



illustrative summary of the findings from the SEM analysis, Table 75 lists the statistical results of the hypotheses testing in Chapter 4.

**TABLE 75**

**Summary of Hypotheses Test Results**

<b>I. Five main effects hypotheses:</b>	<b>Results:</b>
<b>H<sub>1a</sub>:</b> The consumer's evaluation of the foreign product positively influences the consumer's attitude towards the foreign product.	Supported
<b>H<sub>1b</sub>:</b> The consumer's evaluation of the foreign product positively influences the consumer's willingness to buy the foreign product.	Supported
<b>H<sub>1c</sub>:</b> The consumer's attitude towards the foreign product positively influences the consumer's willingness to buy the foreign product.	Supported
<b>H<sub>2a</sub>:</b> Country-of-origin image positively influences the overall evaluation of the foreign product by the consumer.	Supported
<b>H<sub>2b</sub>:</b> Country-of-origin image positively influences consumer attitude towards the foreign product.	Supported
<b>II. Five interaction effects hypotheses for CET as a moderating variable:</b>	<b>Results:</b>
<b>H<sub>3a</sub>:</b> As consumer ethnocentrism increases, the magnitude of the effect of country-of-origin image on the consumer's evaluation of the foreign product increases.	Partially Supported
<b>H<sub>3b</sub>:</b> As consumer ethnocentrism increases, the magnitude of the effect of country-of-origin image upon the consumer's attitude towards the foreign product increases.	Not Supported
<b>H<sub>3c</sub>:</b> As consumer ethnocentrism increases, the magnitude of the effect of consumer's evaluation of the foreign product on her attitude towards the foreign product increases.	Not Supported

<b>H<sub>3d</sub></b> : As consumer ethnocentrism increases, the magnitude of the effect of consumer's evaluation of the foreign product on her willingness to buy the product increases.	Partially Supported
<b>H<sub>3e</sub></b> : As consumer ethnocentrism increases, the magnitude of the effect of consumer's attitude towards the foreign product on her willingness to buy the product increases.	Partially Supported
<b>III. Five interaction effects hypotheses for animosity as a moderating variable:</b>	<b>Results:</b>
<b>H<sub>4a</sub></b> : As animosity increases, the magnitude of the effect of country-of-origin image on the consumer's evaluation of the foreign product increases.	Partially Supported
<b>H<sub>4b</sub></b> : As animosity increases, the magnitude of the effect of country-of-origin image upon the consumer's attitude towards the foreign product increases.	Not Supported
<b>H<sub>4c</sub></b> : As animosity increases, the magnitude of the effect of consumer's evaluation of the foreign product on her attitude towards the foreign product increases.	Not Supported
<b>H<sub>4d</sub></b> : As animosity increases, the magnitude of the consumer's evaluation of the foreign product on her willingness to buy the product increases.	Partially Supported
<b>H<sub>4e</sub></b> : As animosity increases, the magnitude of the effect of consumer's attitude towards the foreign product on her willingness to buy the product increases.	Supported

## DISCUSSION

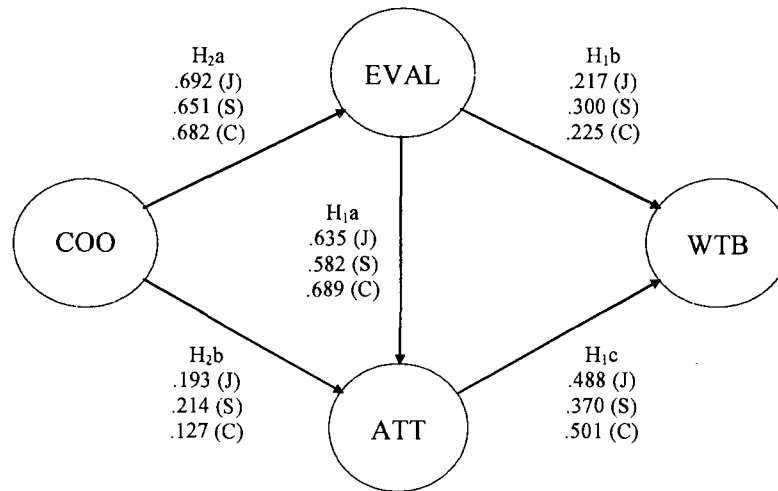
### Main Effect Hypotheses

Figure 8 provides the regression weights for the five main effects hypotheses across all three countries (Japan = J, South Korea = S and China = C in the model).

Factor indicators and errors were omitted from the model to simplify the illustration and focus attention to the comparisons of the significant path estimates.

**FIGURE 8**

**Path Model with Main Effects Estimates**



Upon examination of the regression weights in Figure 8, it is evident that most decisions follow the typical consumer purchasing behavior route by going through three distinct, sequential stages prior to product purchase. As discussed in Chapter 1, these stages are based on established theoretical models, particularly the hierarchy of effects model (Mowen 1995), the multi-attribute attitude model (Fishbein and Ajzen 1975) and Lutz's (1981) unidimensional attitude theory, that aid in explaining the relationships between beliefs, attitudes, behavioral intention and behavior. As expected, the majority of the respondents used their perceptions of the country of origin to form an overall evaluation of products from that country. This evaluation is then used in the formation of the consumer's attitude towards the foreign product, which subsequently will determine her willingness to buy the product in the future. As illustrated in Figure 8, these three relationships (Hypotheses H<sub>2a</sub>, H<sub>1a</sub> and H<sub>1c</sub>) have the strongest standardized path estimates across all three countries of analysis.

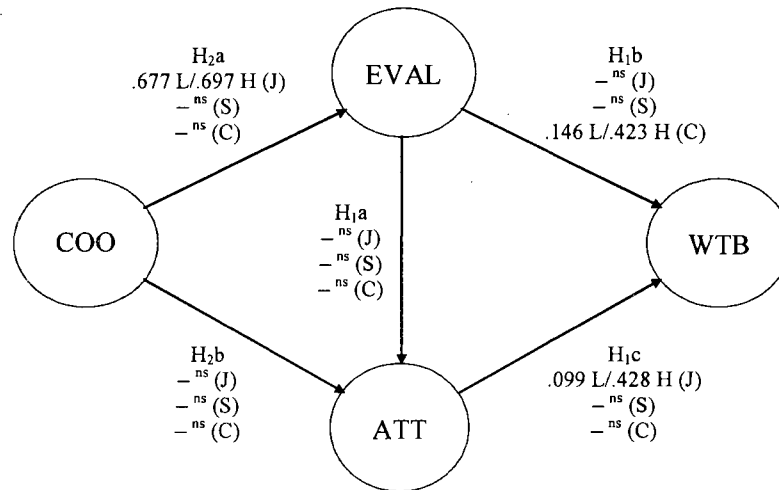
The two remaining paths (Hypotheses H<sub>2b</sub> and H<sub>1b</sub>) were also found to be significant across all three countries; however their low regression weights are indicative of the extent of influence they exert upon the endogenous variables in the model. While country-of-origin image can significantly impact the consumer's attitude towards the foreign product, COO information is more belief-based rather than affect-based and will typically have a stronger influence upon product evaluation. Likewise, the consumer's evaluation of the product may directly impact her willingness to buy the product, especially if the consumer has little or no past experience with the product category or if the product is an impulse purchase. Product evaluation tends to have a stronger effect upon attitude formation (i.e., an enduring feeling towards the object of interest based on past evaluations and experiences), which in turn influences future purchase intentions and actual purchases.

### **CET Interaction Hypotheses**

Consumer ethnocentrism (i.e., the consumer's belief that buying foreign products is unpatriotic, immoral and will potentially result in a domestic employment reduction and economic damage) is proposed to have a moderating effect upon the five main effects hypotheses tested in this study. Figure 9 provides an illustration of the standardized path estimates for these interaction effects across all three country models. Paths that resulted in insignificant estimates are also duly noted; however their estimate values were not posted in the diagram.

**FIGURE 9**

**Path Model with CET Interaction Estimates**



-<sup>ns</sup> indicates that the estimate is not significant at the 0.01 level.

The results suggest that consumer ethnocentric tendencies manifest themselves in three path relationships. In the first relationship, the CET variable appears to interact with the effects of COO image upon the consumer's evaluation of the foreign product. The data particularly supports this moderating effect with regards to Japanese products rather than the South Korean or Chinese products. This relationship stands to reason since consumers who are highly ethnocentric are more sensitive to the product's country-of-origin and will seek out this information when evaluating the product for potential purchase. When faced with a purchase consideration set comprised of several product choices, highly ethnocentric consumers will place higher regards towards the COO information over other product attributes and will tend to purchase domestic products, even when these products are somewhat inferior to their foreign counterparts. There may be a cut-off point with respect to a minimum acceptability level of product quality that

will disqualify certain product choices regardless of their COO, but that is beyond the scope of this research endeavor.

The second and third significant CET interactions occur during the latter stages of the model which suggests that, despite favorable overall evaluations and attitudes towards the foreign product, highly ethnocentric consumers will purchase the domestic product instead due to their strong ethnocentric tendencies. For example, a U.S. consumer with strong levels of CET may rate German and Japanese automobiles more favorably on various product attributes than U.S. vehicles, but will always purchase a U.S. vehicle brand to help keep their fellow autoworkers employed. This action fosters a sense of national pride and accomplishment within this consumer, who believes that she is boosting the domestic economy by keeping her money within her country's borders. While inconclusive at best, these results suggest that CET exerts some degree of influence throughout the consumer purchase choice process.

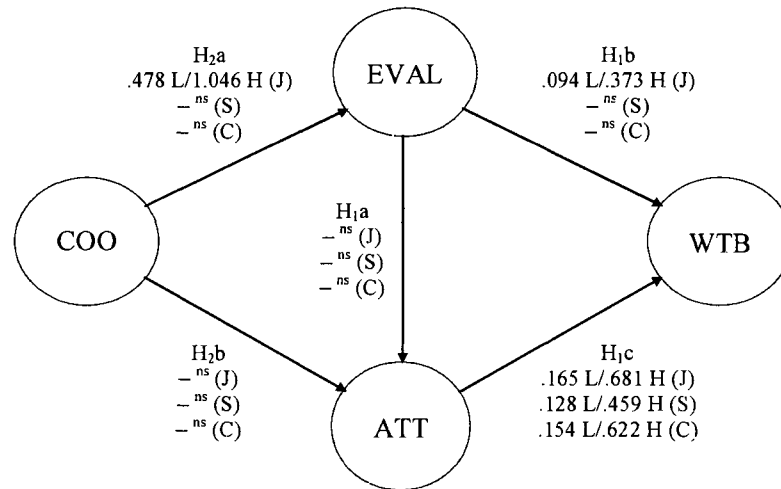
### **Animosity Interaction Hypotheses**

International animosity is a relatively new field of study in marketing with three main areas of study (Riefler and Diamantopoulos 2007); research that establishes the construct's theoretical foundations (e.g., Klein, Ettenson and Morris 1998; Klein and Ettenson 1999), studies that validate the effects of animosity upon foreign product purchase (e.g., Kesic, Rajh and Vlastic 2005; Klein 2002; Russell 2004; Shin 2001; Witkowski 2000) and studies that refine the construct with regards to operationalization and applicability (e.g., Hinck 2004; Shimp, Dunn and Klein 2004; Shoham *et al.* 2006). In this dissertation, animosity is posited to interact with variables that determine the consumer's perceptions of and receptivity towards products from other countries. Figure

10 provides the standardized estimates for the moderating effects of international animosity upon the paths of the proposed structural model.

**FIGURE 10**

**Path Model with Animosity Interaction Estimates**



-<sup>ns</sup> indicates that the estimate is not significant at the 0.01 level.

Results of the animosity hypotheses were similar to those of the CET assessment and also suggest that the variable moderates the influence of COO image upon the consumer's evaluation of the foreign product. Consumers with high levels of animosity may be hindered by their dislike for the country from making fair judgments about that country's products. In other words, this animosity may make COO information more salient to the consumer, bias their normal, rational judgment and override the other attributes of the product.

Animosity was also shown to exert some influence upon the relationship between product evaluation and the consumer's willingness to buy the product. As stated before, there are some instances where a consumer purchases a product soon after their

evaluation of it. In these situations, she has not had sufficient time to form a concrete attitude towards the product; however subsequent purchases within this product category will likely be affected by her developed attitude towards the product. The moderating effect of animosity upon the relationship between the consumer's attitude towards the foreign product and her willingness to buy the product is considered as the most significant interaction finding in this study. This interaction proved to be significant across all three country models whereas the other moderating effects were either partially supported or not supported in the study. The strong influence of animosity towards the final stages of consumer product choice has been supported by previous research and suggests that consumers do not make product judgments based on their ill feelings towards a country (Klein, Ettenson and Morris 1998). Given that animosity consists of a strong affective component, it manifests itself when consumers search their attitudes toward the foreign product when considering purchase choices.

While both CET and animosity were found to have similar interaction effects within this study's proposed framework, it is important to note that they are distinctly different constructs. Both CET and animosity can make COO information more salient to consumers and bias their evaluations of products from other countries. While consumers with high levels of CET and/or animosity towards a country may be capable of making sound product evaluations, they may not consider purchasing products from that country for reasons that differ from one another. Consumers with ethnocentric tendencies buy domestic products to help their country and exhibit national pride while consumers with animosity towards a country avoid purchasing products solely from that country. They are not motivated to buy domestic goods or avoid products from countries that they do



not harbor ill feelings toward. So although the consequence of avoiding product purchases from a particular country is the same for consumers with CET or animosity, the eventual product choice may differ. CET consumers will most likely choose an alternative product from their domestic country while consumers with animosity may choose a domestic or foreign good to satisfy their current needs.

## **IMPLICATIONS**

The implications of this study's findings are divided into two categories, theoretical and managerial. Theoretical implications refer to the expansion of knowledge to guide humans in understanding phenomena and the relationships between factors that impact these phenomena. While conducting research for the sake of nomological advancement is a worthwhile endeavor, the real world application of theory is sought after by business managers to help them gain competitive advantages, increase efficiencies or create some other improvement to their business model and practices.

### **Theoretical Implications**

In this study, the key determinants of consumers' willingness to purchase foreign goods were identified and organized into a causal framework. Consumer receptivity of products from other countries is comprised of both cognitive (i.e., product evaluation) and affective (i.e., attitude towards the product) factors that subsequently influence future product purchases. While these relationships have been assessed to some extent in previous research, the studies did not test the strength of these relationships in a comprehensive, complex framework. In contrast, this study tested the direct relationships among four constructs simultaneously in a model that predicts U.S. consumers' intention

to buy foreign products from three Asian countries. Testing the model across these countries increases the generalizability of the findings as well as the validity of the model.

In general, the findings indicate that beliefs about the product influence attitude formation and will predict future purchase intentions. These product beliefs may consist of COO information that could positively or negatively impact the overall product evaluation, depending upon the consumer's perception of the country's image (i.e., the person's beliefs about the country, her affect towards the people from that country and her desired level of interaction with the country). Other country-related variables, such as CET and international animosity, also play an important role in influencing consumer's perceptions of and receptivity towards foreign goods and services.

Researchers have identified the need for more complex modeling than has been attempted in past research due to the complexities of country-related variables and their relationships with each other within the consumer decision making process (Pharr 2005). This framework investigates potential moderating effects of CET and animosity to validate their importance in the consumer choice process. More insight into the causes and consequences of these variables will lead to better applicability of existing marketing strategies as well as the creation of new ones that are designed to either enhance or suppress the perceptions that consumers have toward their own country as well as foreign countries.

The relationship of animosity and consumer ethnocentrism needs further investigation to understand the interplay between the two variables. Animosity towards a particular country may actually be a subset or an affective dimension of consumer

ethnocentrism. In other words, consumer ethnocentric tendencies could manifest themselves as overall dislike for another country or countries that is primarily based on overt patriotism and other strong in-group feelings. If the strong connection with the in-group is weakened or severed, the feelings of dislike may dissipate as well. While this model was designed initially to examine potential interaction effects caused by CET and animosity, the results of the study are mixed, indicating that more analyses are needed to flush out the true nature of these relationships. For example, the model can be used as a template to assess potential main effects of CET and animosity upon the various stages of the consumer behavior framework as well as assessing the afore-mentioned proposition that animosity is directly related to CET.

Testing the model across various cultural samples may provide insight concerning differences in cultural dimensions and their effects upon consumer perceptions and intentions. The model can easily be modified to accommodate these cross-cultural comparisons and path estimates can be compared to determine if the strength of these relationships vary across sample groups. Reverse analysis is possible to determine which determinants are more prevalent in certain cultural groups and can provide direction for researchers to extend the study by identifying key causes of consumers' reluctance to purchase goods from a particular country. With regards to the transition from research to application, marketers are more capable of making good business decisions and developing strategies if they are aware of potential roadblocks prior to entering the market with their goods and services.

The present study provides a framework in which testing the relative strength of product choice determinants is possible across different product categories as well as

varying sets of product and/or consumer attributes. With regards to assessing animosity and CET across different markets, these constructs may have varying levels that could override one another during the consumer decision making process. For instance, “in other markets, where animosity is stronger and consumer ethnocentrism is less prominent, animosity might dominate in a choice between a domestic and a foreign product” (Klein 2002, p.358). Other markets may have strong consumer ethnocentric tendencies that will make successful market penetration near impossible for foreign firms using conventional marketing strategies. These firms will have to rely on partnerships with local firms to boost their image and thereby increase the likely acceptance of their products and services by the local consumers. The framework in this dissertation provides a valid structure that details each stage of the consumer’s willingness to purchase foreign products. Researchers can effectively test the impact of specific variable sets that closely define the market of interest and determine the nature of their relationships in order to understand the market and accurately forecast their reaction to new foreign product offerings.

### **Managerial Implications**

Practitioners may benefit in several ways from the development of a holistic framework that investigates the impact of country-related variables upon the consumer decision-making process. A consumer’s cognitive associations with a country and its products tend to influence her overall evaluation of the product; therefore marketers may manipulate the amount of COO information when advertising, promoting or educating consumers about new product offerings. They can deliberately emphasize the COO information if the country-of-origin is vastly perceived in a favorable light by the

consumers in that market. The COO information can also be de-emphasized to avert consumer's attention from an unattractive country-of-origin towards more attractive product attributes.

According to the tested model, the COO information becomes less relevant once consumers have developed an enduring attitude towards the product; however the consumer must be persuaded to try the product initially and may have reservations concerning the product's country of origin. These reservations may be due to poor product quality perceptions from owning other goods from that country, animosity towards the country or strong ethnocentric tendencies. While the consequence of avoiding the product is the same for all three cases, the reasons for the avoidance are different. Marketers must accurately ascertain the reason for rejection in order to provide the proper corrective action to win the consumer's acceptance of the product or service and to initiate the process of trial and adoption that may eventually lead to repeat purchases and brand loyalty.

In addition to influencing overall product evaluation, the findings also suggest that the effects of consumer ethnocentrism and animosity upon product purchase intentions occur independently of product judgments. "Practitioners and researchers often assume a relationship between evaluations of a product's quality and purchase decisions. This assumption is certainly valid in many contexts and provides the rationale for micro-level marketing research that focuses on product attributes, product promotion, and their effects on brand choice" (Klein, Ettenson and Morris 1998, p. 97). This study advocates the importance of macro-level sociological influences that may have a greater effect upon consumers' purchase decisions in certain situations. Managers must therefore take these

sociological variables into consideration when developing actionable marketing strategies and should not solely rely on conventional tools (e.g., sales promotion, advertising and pricing) to attract highly ethnocentric consumers or those with high levels of animosity towards a country. Lowering the price or providing heavy sales promotions will not deter a consumer from avoiding the product based on her animosity towards the foreign country of origin or her high level of ethnocentrism.

The most plausible route for the marketer to take would be to make the product appear as “local” as possible. The marketer could change the brand name to a word that is meaningful in the native language. Advertisements for the product should primarily portray native actors and actresses, a local soundtrack and culturally recognizable lifestyles, aesthetics and events within the ads. Testimonials and product endorsements should be sought from native celebrities in the sports and entertainment venues or from local opinion leaders and professionals, depending on the nature of the product offerings. On a similar note, product placement should be conducted in local movies, television shows and sponsored events that receive huge fanfare and media attention. These actions are plausible marketing techniques that may change the image of the product in the minds of the local consumers by following the conventional adage that “familiarity and similarity eventually leads to increased likeability.”

Consumer ethnocentrism and animosity appear to exert influence during the same stages of the model, but are caused by vastly different reasons. Highly ethnocentric consumers favor domestic products due to a high sense of patriotism, national pride and camaraderie with their fellow citizens. In contrast, a consumer’s animosity towards a particular country does not reflect a sense of nationalism, but is caused by economic-

related and/or war-related issues. Unlike CET, animosity leads to the avoidance of product offerings from a specific foreign country rather than avoidance towards all foreign products. Firms can use CET as a segmenting tool for the general market and implement various strategies that will overcome these consumers' aversion towards foreign goods.

There are several ways that a firm can enter a foreign market with its products, depending on the degree of control that the firm seeks with regards to the distribution of its products. Market entry strategies can range from indirect exporting to full-scale foreign direct investment within the host country (Cateora and Graham 2007). Exporting and licensing provides the firm with access to the foreign market; however the company relinquishes control of the distribution of the product and the production of goods that bare the brand's name, respectively. Franchising permits a local business person to purchase the company's business model, but no changes are made to the brand name or identity to encourage local consumers to purchase the foreign brand products. All of these options do not foster a partnership approach to conducting business with the local community and are invasive rather than integrative approaches in distributing products within the foreign market.

Given these issues, the best alternatives are brand alliances, joint ventures and foreign direct investment. All three allow the firm substantially more control over the production and distribution of their products while providing the firm with an opportunity to become more "local." For example, a firm can develop a joint venture with a local company to increase the success of their acceptability when entering the foreign market. By giving the local firm the dominant presence in the joint venture, the ethnocentric

market will perceive the new business as locally owned and operated, thus increasing the probability of the market's acceptance of its products and services. Firms that have foreign direct investments would have an active presence in the local marketplace, employ local workers, cooperate with local businesses and be more sensitive to local market issues and fluctuations. In time, these companies may appear to be local rather than foreign to the native consumers. Finally, forming brand alliances with local firms are another way for foreign firms to offset the negative perceptions that local consumers may have about the country of origin, provided that there is a believable level of congruency or fit between the two brands with regards to quality, value, brand reputation and other product/company-related attributes (Bluemelhuber, Carter and Lambe 2007).

CET and animosity towards a foreign country have very different implications upon consumers' choice of products. "If the choice is between a domestic and a foreign good, then highly ethnocentric consumers will be likely to choose the domestic product. If the choice is between two foreign goods, one of which comes from a country that is the target of hostility, then animosity will predict the choice" (Klein 2002, p. 358). With regards to animosity, if consumers' disdain towards a country is strong enough to lead to purchase avoidance, marketers should understate any current relationships that they have with that country and choose not to enter into future business arrangements with its local firms until this animosity has subsided. As noted in the study, animosity appears to have more influence at the latter stages of the consumer perception and choice model, particularly during the purchase intention (i.e., willingness to buy) stage. In other words, consumers may have favorable perceptions of the product and its attributes, but when



faced with the decision to purchase the product, the consumer will decline due to her dislike towards its COO.

Another marketing strategy that may circumvent the consumer's animosity towards the product's COO is FDI, whereby the firm "sets up shop" in the host country by employing the local workforce, partnering with local suppliers and businesses and building a strong local presence in the marketplace. In time, these actions may persuade consumers to perceive that the company is operating with their best interests in mind and is no longer considered as a product of the foreign enemy, but as an integral part of the local community. An extremely riskier approach for marketers would be an attempt to change people's attitudes towards a country in hopes of improving consumers' receptivity towards its products. This can be achieved through remedial advertising efforts in an effort to re-educate consumers about the positive aspects of the unfavorable country. As stated, the firm would be taking on a huge risk by adopting this strategy, which could result in the unwanted transfer of animosity from the country to the firm and its brands.

On a final note, animosity and CET will have substantial impact upon governmental decisions with regards to cross-border trade and manufacturing. In democratic societies, policy makers are elected by their constituents to represent their ideals and opinions. If the public majority has strong negative feelings towards a country, they will most likely avoid or boycott products from that country. Government officials must be tuned in to the voices of the majority and make decisions that will keep them at ease, such as reducing the level of trade with the offending country or negotiating with the country's officials to stop committing current offenses in order to improve their

country's image to the public. If the public is overwhelmingly nationalistic and has strong consumer ethnocentric tendencies, its government must be careful in making policies that increase the country's level of importation or favor overseas business operations such as outsourcing and foreign direct investments. Another strategy for the government is to develop close ties with the country that it intends to heavily trade with in order to foster an appearance of brotherhood between the two nations, thus encouraging the citizens to accept the foreign country as a part of their in-group. Given that the economies of most highly industrialized nations are driven by consumer spending, these are a few examples of how the consumer market and its perceptions can strongly influence governmental actions.

## **LIMITATIONS AND FUTURE RESEARCH**

Certain limitations of this study must be addressed. The majority of the literature, including this study, investigated one or more consumer samples from a single country of analysis. As for sampling frames, shoppers from a single metropolitan area or a convenience sample of college students are typically used as research respondents. Few studies have examined multiple country samples due to the high costs associated with multi-cultural research efforts as well as the increased complexity of interpreting the analytic results. Despite these challenges, future studies should analyze consumers from more than one country to increase the generalizability of this research and to conduct cross-cultural comparisons.

In addition, longitudinal studies should be pursued to investigate the stability and longevity of COO variables (e.g., COO image, CET and international animosity). For

example, recessionary times tend to foster a higher degree of CET within a nation and may even create a strong “us versus them” mentality towards foreign countries and their products. Like any recession though, this nationalistic mindset may be temporary and dissipate when the domestic economy improves. At that time, it would be logical to theorize that the majority of consumers will resume their normal purchasing habits and will no longer actively seek out domestic product alternatives to aid the economy. A longitudinal study would be able to test this theory and capture differences of consumer perceptions at various points in time (e.g., before, during and after a recessionary period).

While most of the constructs in this study have been researched extensively, animosity theory is still a nascent area of marketing research and can be expanded in various directions of study, such as improving model-building specifications, identifying more sources of animosity and determining additional consequences of animosity. For example, religious differences, cultural dissimilarities, racial tensions and irreconcilable political differences may all be sources that underpin animosity between two or more nations. For example, it is reasonable to believe that cultural similarity would foster favorable impressions among nations that share commonalities with one another, while cultural dissimilarity may cause tension and lead to frequent hostilities between countries. Another study identified dogmatism, nationalism and internationalism as possible antecedents of animosity, but require causal research testing to determine the exact nature of their relationship with animosity (Shoham *et al.* 2006). While war, economic and general animosity indicators have been developed and extensively utilized within several studies, these other factors of animosity have not been explored to determine whether animosity generalizes across different sources of anger.

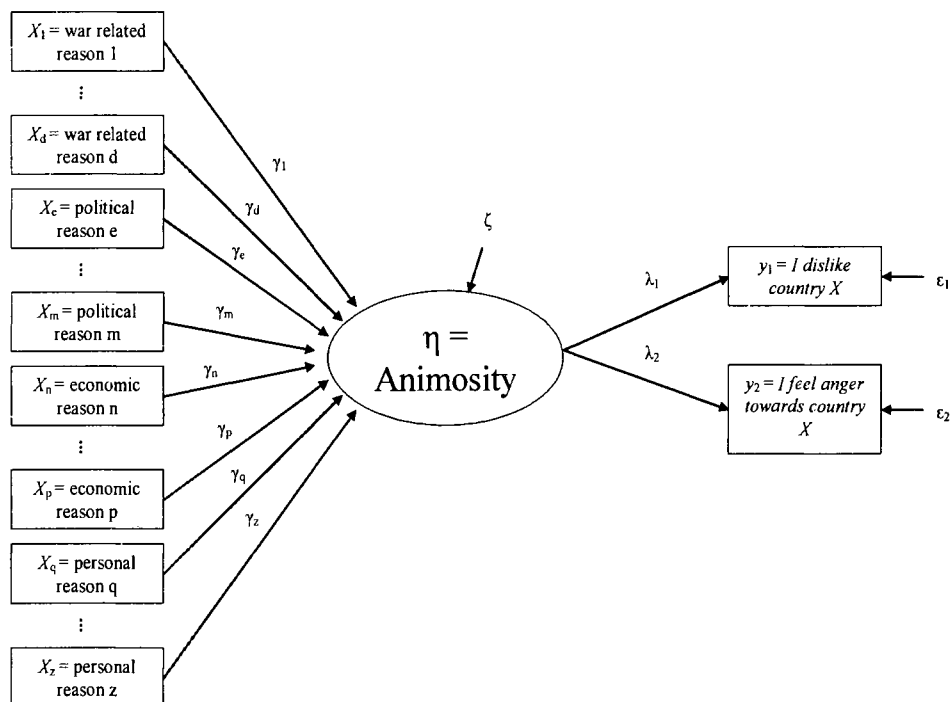
Competing models of consumer animosity, such as the stable/situational – national/personal animosity scale (Jung *et al.* 2002) and the multiple indicators – multiple causes (MIMIC) model (Riefler and Diamantopoulos 2007), have recently been developed and require additional testing for validation across various consumer segments. Jung *et al.* (2002) created a 2 x 2 typology of animosity by differentiating anger as being personal or national as well as stable or situational. “Personal animosity is an individual’s resentment towards another country because of negative personal experiences he or she has with the foreign country or with people from that country” (Jung *et al.* 2002, p. 528). In contrast, national animosity is the individual’s level of disdain towards a country due to the suffering that his or her country has endured because of the foreign country’s actions. Situational animosity refers to dislike generated from specific circumstances at hand or current events while stable animosity is developed over the long term from previous war-related and economic aggressions between the two nations (Jung *et al.* 2002). The authors developed a scale that consists of three national stable animosity items, three personal stable animosity items, four national situational animosity items and five personal situational animosity items. Given that these authors investigated a single event to empirically evaluate the integrity of the model, the instrument should be tested across various situational events to increase the external validity of their proposed typology of animosity.

Riefler and Diamantopoulos (2007) suggest a different model structure whereby “the animosity construct is represented as a latent variable ( $\eta$ ), which is determined by a set of antecedent variables ( $x_1 - x_z$ ) capturing the reasons for animosity. The latter can vary across target countries (i.e., are country-specific), and may be related to warlike

events, to political disputes, to economic issues, personal experiences, or any other sources of animosity. On the other hand, animosity feelings are measured by reflective indicators ( $y_1 - y_2$ ); the latter are general in nature and can be applied irrespective of the specific country that is the target of animosity” (pp. 113-114). This framework for animosity provides the researcher with the ability to tailor the reasons for animosity for a specific country and measure the magnitude of each reason as well as the overall explanatory power of these reasons as a collective set. Figure 11 provides an illustration of the MIMIC model of animosity and future research should empirically test this model for structural integrity and make justifiable modifications to the model as necessary. “In addition, affective statements capturing the intensity of animosity feelings should be generated and also entered in the model (Riefler and Diamantopoulos 2007, p. 114).

**FIGURE 11**

**The MIMIC Model of Animosity**



To add to the future research directions, identifying patterns among product categories that produce similar consumer perceptions may provide valuable insight to consumer behavior. While a general product image is often evaluated, consumers have varying levels of purchase involvement, depending on the importance of the purchase decision itself. Consumers tend to engage in extended decision making when deciding to buy products that are associated with high levels of financial, personal and/or social risk. In contrast, low involvement and repeat purchases leads to nominal decision making and does not require an extensive search for information about the product and its substitutes. The majority of COO effects research has focused on consumers' perceptions of high-risk products (e.g., vehicles, electronic equipment and apparel) while ignoring products that are consumed privately or are considered as routine purchases with little information search or cognitive elaboration. Many of these products are imported and have domestic counterparts; therefore the effects of COO-related variables upon consumers' receptivity towards these products warrant further investigation.

The degree of perceived product necessity may have an important role in mitigating COO effects upon product evaluations. Consumers may evaluate necessary items differently from luxury items and are more prone to overlook negative product attributes (e.g., COO perceptions) when purchasing necessities. In contrast, these consumers tend to consider luxury and big ticket items as being risky purchases and are more critical towards seeking product information. Likewise, the availability of alternative or domestic product choices must be taken into consideration when evaluating the consumer purchase process. The lack of alternatives may alter the consumer's perceptions of foreign products for these types of goods, forcing them to disregard or

reduce the importance of COO information and buy the product as the only option to forgoing consumption.

Another boundary of research investigates the trade-off between a consumer's level of animosity or CET and her desire for a coveted product from the foreign country. More research needs to be conducted to determine the point where the customer will sacrifice their principles in order to obtain the desired product. What rationale is used by the customer to justify the purchase with minimal guilt or apathy towards adverse social consequences? This information is useful to marketers in order to effectively advertise the product to help coax the customer to take the plunge and make the purchase by downplaying or perhaps even making fun of the potentially negative consequences, thus reducing the customer's dissonance and validating her purchase decision.

With the proliferation of global brands, meta-brands, and brand extensions, the effects of COO image, CET and animosity within various branding situations must be analyzed more extensively. While studies have attempted to parse COO information into various operationalizations to include country-of-design, country-of-manufacture, country-of-parts and country-of-assembly, foreign brand evaluations have not been extensively diagnosed to determine the side effects of global branding, brand extensions and co-branding upon consumer perceptions of products and services. The influence of brand image should be contrasted with consumers' perceptions of foreign countries to determine if brand equity is capable of neutralizing the impact of COO image and therefore play a more significant role in the consumers' receptivity of the foreign product. Researchers should attempt to determine the strengths and weaknesses of these branding

strategies under various conditions and develop marketing strategies to enhance product acceptability among foreign consumers.

While this dissertation focused on physical products offered from another country, the research needs to be extended into areas outside of the conventional B2C product offerings as well as into the service industry. These areas of research expansion could include such topics as consumer perceptions of foreign services, consumer evaluations of foreign goods and services within the B2B arena and the impact of COO image upon consumer perceptions of nonprofit and government-sponsored services. As for the popularity of trade arrangements among countries, free trade areas (e.g., NAFTA, ASEAN and the EU) are becoming the norm for countries in order to gain competitive advantages and develop cross-border efficiencies in both production and service provision. And with the rapid dissemination of internet access and communications technology, services are becoming increasingly important within the global marketing landscape. For example, many services are currently being outsourced to other countries due to the vast cost reductions facilitated by paying foreign workers lower wages than domestic employees. More research should be conducted to determine if the COO effects upon tangible products transcends equivocally into the realm of foreign services.

Additional research is needed to assess how cultural dimensions play a role in the consumers' perceptions and purchase of foreign products. Hofstede (1984) identified four primary cultural dimensions that can adequately describe a nation's society, namely individualism/collectivism, power distance, masculinity/femininity and uncertainty avoidance. To date, individualism/collectivism (Gürhan-Canli and Maheswaran 2000) and power distance (Insch and McBride 2004) have been studied in relation to the



consumers' perceptions of COO image. CET research has also been limited to the study of individualism/collectivism and suggests a positive relationship between collectivism and CET (Sharma, Shimp and Shin 1995). The literature review also failed to identify studies that have conducted investigations of the potential relationships between Hofstede's national cultural dimensions and international animosity. A better understanding of the interplay between COO-related variables and a country's cultural dimensions may lead to the development of better marketing strategies to overcome COO issues at the national level, thus resulting in profitable marketing actions for companies entering a new foreign market.

With regards to generalizing research findings across foreign markets, more studies are needed in African, Latin American and Middle Eastern countries. The more economically-developed regions of the world (e.g., North America, Europe and Asia) have been extensively analyzed with regards to COO effects and consumer product perceptions while less-developed countries have been mainly ignored. Marketers tend to focus on markets that they perceive as having the most profit potential and therefore set their sights upon highly industrialized and service-oriented economies. This bias is very short-sighted since the less-developed, least-developed and bottom-of-the-pyramid markets have a vast amount of disposable income and more importantly, are untapped markets with respect to little saturation of competitive product and service offerings. If marketers can overcome COO biases and gain successful market entry, they may be able to capture a huge percentage of the market share before other competing firms take notice and enter that market.

In summary, there are several avenues of research that can expand our knowledge of how consumers use COO information to evaluate and choose products and services. Certain characteristics of the consumer will play an active role at various stages of the evaluation and purchase process. This research has attempted to provide a holistic framework that encompasses the stages of this process and validates the relationships among its key variables. If marketers are armed with an accurate understanding of the process and its primary determinants, they can develop successful marketing strategies that will be beneficial for the firm as well as aid the consumer in making better choices among the vast sea of product and service offerings that are available in the current marketplace.

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## Appendix A

### Summary of Articles from the Literature Review (in reverse chronological order)

Authors	Sample	Methods	Main Findings	Research Suggestions
Klein, Eitenson and Krishnam 2006.	200 Russians and 131 Chinese (half of total sample are students).	SEM and CFA.	CET directly influences EVAL and ATT.	Use more representative samples and investigate the relationship between CET and ATT for other variables of influence.
Kwak, Jaju and Larsen 2006.	611 U.S., 221 South Korean, and 271 Indian undergraduates.	SEM.	CET directly affects ATT, but this relationship is also mediated by consumer globalization and consumer attitude towards foreign ads.	Test with specific foreign products and foreign ad types.
Shoham <i>et al.</i> 2006	135 Israeli consumers.	SEM.	Animosity directly influences INT, but this relationship is also mediated by EVAL. INT directly affects PUR.	Examine the longitudinal affects of animosity on consumer buying decisions.
Laroche <i>et al.</i> 2005	436 North American metropolitan citizens.	SEM.	Country image directly influences EVAL, but this relationship is also mediated by product beliefs.	Examine more facets of country image. Contrast negative country image with positive COO cues for popular domestic goods.
Ahmed <i>et al.</i> 2004	236 Singaporean college students.	ANOVA and conjoint analysis.	Brand and price are stronger predictors than COO towards EVAL and INT.	Retest with diverse food groups and samples. Analyze role of brand familiarity.
Balabanis and Diamantopoulos 2004	465 U.K. consumers.	MDU analysis, GPA, and logit analysis.	The effect of CET on EVAL is weak and varies across product categories. National economic competitiveness and cultural similarity did not effect the link between CET and EVAL.	Examine other factors that affect EVAL and identify similar patterns among product categories. Test assimilation and acculturation effects.

Authors	Sample	Methods	Main Findings	Research Suggestions
Nijssen and Douglas 2004	219 Dutch consumers.	CFA and multigroup analysis.	Economic animosity's effect on EVAL is mediated by CET, CET, EVAL, and war animosity directly affects reluctance to buy (INT).	Test with levels of domestic product availability, add worldmindedness and product involvement, and search for additional sources of animosity. Test with other outward-oriented nations.
Ittersum, Candel and Meulenber 2003	130 Dutch consumers.	SEM and ANOVA.	Attitude towards ROO affects ROO image, PAE, and EVAL. Effect of ROO image on EVAL is mediated by PAE.	Test with larger samples and product types. Separate cognitive and affective factors of ATT towards ROO.
Orbaiz and Papadopoulos 2003	198 Spanish adult consumers.	SEM and multigroup analysis.	Product-country familiarity and COO image affect EVAL, which influences INT. Affect towards COO and CET affect INT.	Explore the relationships between these variables to determine managerial implications.
Orth and Firasová 2003	295 Czech urban consumers.	Conjoint analysis and REG.	CET, age, and product class involvement influences EVAL.	Extend study to other predictor variables, dependent variables, food categories, and consumer groups.
Zhou and Hui 2003	1200 Chinese adult consumers.	REG.	Both utilitarian and symbolic values of foreign products influence INT, but intensity depends on product type.	Examine differences in the PRC markets and administer unobtrusive data collection to minimize bias.
Bandyopadhyay and Banerjee 2002	124 Indian urban consumers.	ANCOVA and pairwise comparison tests.	EVAL is higher for products from ICs than for NICs. EVAL is similar for imported or domestically produced products through a JV.	Test with other countries, product categories, services, and other product cues.
Goldberg and Baumgartner 2002	1338 Thai urban high school students.	Means analysis.	Cross-country attraction influences PUR due to consumers' desire to emulate a perceived lifestyle of people from that foreign country.	Examine young adults in a comparable study.
Hui and Zhou 2002	192 Canadian college students.	MANOVA and SEM.	COO and brand image similarly impact EVAL. EVAL and price affect perceived value. Perceived value affects INT. Price and brand image also directly impacts INT.	Test different COO cues as well as cultural and economic factors. Investigate the effects of congruency between brand and COO image on EVAL and INT.

Authors	Sample	Methods	Main Findings	Research Suggestions
Kaynak and Kara 2002	240 Turkish urban consumers.	CFA, cluster analysis and ANOVA.	Significant correlation exists between lifestyle patterns of Turkish consumers and their CET levels.	Replicate study with longitudinal data. Examine product or brand specific effects of COO cues.
Klein 2002	202 U.S. adult consumers.	SEM.	Animosity affects willingness to buy, while CET affects EVAL and willingness to buy.	Examine other animosity types and CET in affecting COO processing and EVAL.
Laroche <i>et al.</i> 2002	554 Canadian consumers.	ANOVA and CFA.	Subcultural differences exist in consumers' perceptions of linked countries and their products. Acculturation also affects COO image.	Subcultural differences should be analyzed in cross-cultural studies. Test effects of specific product types and foreign country contact.
Suh and Kwon 2002	120 U.S. and 128 S. Korean students.	SEM.	CET affects both EVAL and reluctance to buy foreign goods. Global openness affects CET.	Examine effects of other social-psychological factors within each cultural context.
Bandyopadhyay 2001	155 Indian graduate students.	Means analysis and paired t-tests.	COO image influences EVAL. Indian consumers have varied COO perceptions, based on different product-related dimensions.	Include other countries to examine Indian consumers' COO perceptions.
Chao 2001	720 U.S. college students.	ANOVA.	COA, COD, and COP directly effects ATT and PUR; however their interaction results are mixed.	Collect cross-national data and use different sample types. Examine ATT with varying degrees of COPs.
Huddleston, Good and Stoel 2001	622 Polish consumers.	ANOVA and paired t-tests.	COO image, CET, and product necessity influence EVAL. The influence is stronger for products not necessary for daily living.	Use multiple cues for product ratings and better measures for consumer perceived necessity. Test for effects on INT.
Loeffler 2001	383,000 European car magazine readers.	CFA and means analysis.	French, German, Italian, and Spanish consumers judge foreign car brand quality as inferior to their domestic brands.	Test COO effects on INT and PUR.

Authors	Sample	Methods	Main Findings	Research Suggestions
Quester and Chong 2001	288 Australian-Chinese consumers.	Means analysis.	The effect of acculturation on EVAL and PUR is moderated by age and education. Younger, more educated consumers have higher acculturation.	Compare bi-cultural consumers with their uni-cultural counterparts. Consider adoption rate of various cultural aspects.
Chinen, Jun and Hampton 2000	236 U.S. households.	CFA, ANOVA, paired t-tests and REG.	The effect of national economic status on INT is mediated by COO image. Market presence and EVAL also influence INT.	None given.
Chung and Pysarchik 2000	93 Korean college students.	SEM.	EVAL is the strongest predictor of ATT. ATT is the strongest predictor of INT. Group conformity and face saving were only significant for domestic products.	Test with a larger sample size. Examine the role of CET on consumers' purchasing behavior of both domestic and imported products.
Gürhan-Canli and Maheswaran 2000	86 U.S. and 82 Japanese undergraduate students.	ANOVA, REG and mediation analysis.	COO image and PAE influences EVAL. Both relationships are moderated by cultural orientation.	Investigate behavioral differences within other domains of buying behavior.
Kaynak, Kucukemiroglu and Hyder 2000	196 Bangladeshi urban consumers.	CA and CFA.	COO image affects Bangladeshi consumers' EVAL. Product type and national economic status influence COO image.	None given.
Teas and Agarwal 2000	530 U.S. college students.	ANOVA, ANCOVA, MANOVA and CFA.	COO image, price, and brand image directly effect EVAL. Store image effects were mixed for the two products examined.	Analyze consumers' perceived risk on EVAL. Test effects of quality and value cues on transaction and acquisition values.
Watson and Wright 2000	421 New Zealand consumers.	Paired t-tests.	COO image, cultural similarity, and CET influences ATT and INT. Cultural similarity and CET also interacts to affect ATT and INT.	Test the influence of CET with other product categories and countries. Examine factors of ATT and INT of non-ethnocentric consumers.
Agbonifoh and Elimimian 1999	367 Nigerian adult consumers.	ANOVA and SNK.	COO image affects ATT. Nigerians rate domestic products the lowest across all dimensions.	Develop an explanatory model and research other African countries. Measure other ATT components.



Authors	Sample	Methods	Main Findings	Research Suggestions
d'Astous and Ahmed 1999	190 Canadian consumers.	ANOVA, conjoint analysis and REG.	COO image factors are the most significant influencers of EVAL. Product category involvement moderates COO image on EVAL.	Add COP and more brands to the analysis. Use more representative samples and expand geographic area coverage.
Klein and Ettenson 1999	2255 U.S. voters.	REG.	Socioeconomic status, personal-economic well-being, patriotism, and gender predict CET. Prejudice towards Asians, patriotism, race, and age predict animosity.	Use full measures of the constructs as outcome variables. Test racial prejudice's influence on animosity and CET within other cultures. Consider other animosity factors.
Leonidou <i>et al.</i> 1999	135 Bulgarian consumers.	ANOVA and MANOVA.	Experiential knowledge was the most utilized product information source. Age, gender, and social class influence information usage. COO image affects EVAL and ATT. PAE influences EVAL.	Test the effects of psychological and behavioral dimensions of COO image. Examine CET of Bulgarians. Conduct hybrid product evaluations to determine COO image effects.
Okechuku and Onyemah 1999	1721 Nigerian consumers.	Paired t-tests, REG and conjoint analysis.	Brand image and COM image influence EVAL more than PAE. COM image influences INT.	Add product categories and other countries. Include unknown and fictitious brands to assess the effects of brand familiarity.
Richey, Rose and Dominguez 1999	152 Venezuelan, 152 Mexican, and 152 U.S. consumers.	MANOVA.	National industrial development influences COO image. The effect of COO image on EVAL is moderated by financial risk and product content. Home country bias was not detected.	Compare Mexican export competition to Canadian and other Latin American markets.
Ziamou <i>et al.</i> 1999	955 Bulgarian consumers.	SNK.	COO image affects both EVAL and INT; however varied EVAL ratings produced the same INT.	Separate factors influencing EVAL and INT, such as historical/cultural similarities and geographic proximity.
Granzin and Olsen 1998	240 U.S. urban adults.	SEM.	Patriotism, CET, social concern, and common fate indirectly affect PUR. Costs of helping and responsibility directly affect PUR.	Compare other variable conceptualizations, retest weak or unsupported model paths, and examine effects of individualism.

Authors	Sample	Methods	Main Findings	Research Suggestions
Heslop, Papadopoulos and Bourk 1998	236 Canadian consumers.	MANOVA.	Ethno-cultural affiliation influences COO image, which affects EVAL. The effect of low national economic development had stronger influence on COO image than ethno-cultural affiliation.	Conduct more studies of consumer perceptions of other sets of ethnically affiliated countries. Examine the nature and influence of subcultural groups within countries.
Klein, Ertenson and Morris 1998	229 Chinese urban consumers.	SEM.	Animosity affects willingness to buy, while CET affects EVAL and willingness to buy. The effect of EVA on PUR is mediated by willingness to buy.	Examine model within other international contexts. Conduct psychographic and demographic segmentation studies and investigate the inverse of animosity.
Mascarenhas and Kujawa 1998	1258 U.S. consumers.	ANOVA.	Females had more CET. Younger, more educated consumers with higher occupational status had less CET.	Other U.S. states, countries, and the ATT construct's internal dimensions should be investigated.
Ulgado and Lee 1998	196 Korean and 165 U.S. college students.	ANOVA.	COM and PAE affect EVAL and INT, although effects differ between U.S. and Korean consumers.	Examine effects of other extrinsic product cues. Include other product types as well as an actual purchase situation.
Bailey and Gutierrez de Pineros 1997	400 Mexican urban consumers.	ANOVA and logistic REG.	Middle-aged, educated, upper socio-economic Mexicans in larger households have less CET and more favorable ATT. Study replicates previous findings for U.S. and Canadian consumers.	None given.
Bhuian 1997	381 Saudi Arabian consumers.	CFA, ANOVA and t-tests.	PAE and COO image affect ATT. Saudi consumers had the most favorable ATT towards products from Japan and USA.	Test with other product categories, samples, and determinants of COO image. Further scale development should be conducted.
Durvasula, Andrews and Netemeyer 1997	144 U.S. and 60 Russian college students.	SEM and MANOVA.	Russians have less CET and more favorable EVAL than U.S. consumers.	Add COO, product types, cultural openness, and other factors to study effects on EVAL.
Fischer and Byron 1997	647 Australian consumers.	Means analysis.	Product quality, value for money and price has stronger effects on PUR than COM image.	None given.

Authors	Sample	Methods	Main Findings	Research Suggestions
Janda and Rao 1997	None.	Conceptual framework.	COO image is influenced by cultural stereotypes and personal beliefs. PAE and COO image affect EVAL, which affects PUR.	Empirically test the framework.
Marcoux, Filiatrault and Chéron 1997	265 Polish college students.	CFA, ANOVA and stepwise REG.	The effects of CET, interpersonal susceptibility, conspicuous consumption, age, income, sex, previous buying behavior, and social status on ATT vary by product type.	Retest with different products, order of presentation, and other samples. Conduct a longitudinal study to test the effects of culture.
Nebenzahl and Jaffe 1997	305 U.S. college students.	ANOVA, t-tests, CFA and joint space mapping.	Both main effects and interaction of brand image and COO image affect EVAL.	Examine the effects of consumer's product experience on brand image and COO image.
Nielsen and Spence 1997	436 U.S. consumers.	ANOVA.	Age, gender, and military service influences CET, which affects PUR.	None given.
Zhang 1997	192 U.S. business college students.	ANOVA, MANOVA and logistic REG.	Individual's NFC moderates the effect of COO information on EVAL and PUR. Argument effects were mixed.	Use between-subject experimental design. Test other personality traits that may moderate COO effect.
Ahmed and d'Astous 1996	365 Canadian college students.	ANOVA.	COA, COD, and brand name significantly affect EVAL. The effect of national economic development on EVAL is mediated by COO image.	Test other COO dimensions and use specific product categories. Include other countries and brands.
Ericksen 1996	76 Belgian, 17 French, 44 British, and 25 Dutch college students.	ANOVA.	Self-image/product-image congruity affects INT; therefore positive ideal self-image enhancement may lead to PUR.	None given.
Häubl 1996	309 German and 313 French car owners.	SEM.	COO's influence on EVAL is mediated by product attributes evaluation. Brand image affects both EVAL and ATT. ATT affects INT.	Test proposed model using other car brands, product categories, and COO. Also test for brand by country interactions.

Authors	Sample	Methods	Main Findings	Research Suggestions
Liefeld <i>et al.</i> 1996	191 Dutch consumers.	ANOVA and ANCOVA.	PAE, COO, price, and gender affect EVAL. COO image, price, gender, age and PAJ affect PUR.	Increase the level of realism of the experiential shopping treatment. Develop methods for individual consumer analysis.
Rawwas and Rajendran 1996	593 Austrian adult consumers.	MANOVA and logit REG.	Worldmindedness and nationalism of consumers affect COO image. COO image affects EVAL.	Compare market segments with different degrees of nationalism and worldmindedness.
Zhang 1996	300 Chinese consumers.	MANOVA, ANOVA and logit analysis.	COO image influences EVAL, ATT, and PUR. Presentation format and product type moderate this effect while cultural similarity does not.	Reexamine with more product types and more countries, particularly European nations.
Good and Huddleston 1995	947 Polish and Russian urban consumers.	ANOVA and t-tests.	CET is influenced by country, age, sex, education, income, and store type. COO image mediates the influence of CET on INT.	Test CET as one of multiple cues. Replicate study with more product types and as markets reform.
Schweiger, Häubl and Friederes 1995	240 Austrian consumers.	REG.	The effect of COO image on EVAL is moderated by the perceived technical complexity of the product evaluated.	None given.
Sharma, Shimp and Shin 1995	667 Korean consumers.	EFA, CFA and REG.	CET is influenced by collectivism, patriotism-conservatism, cultural openness, education, and income. Effect of CET on ATT is moderated by product necessity, PET, and DET.	Examine other potential CET antecedents (e.g., dogmatism and allocentrism) and moderators (e.g., cultural similarity, historical and political economic relations).
Strutton, True and Rody 1995	414 Russian consumers.	MANOVA and MDA.	The effect of COO image on EVAL is a distinct categorical designation based on product characteristics.	Examine national stereotypes and communication media influences using other samples.
Elliott and Cameron 1994	401 Australian adult consumers.	Means analysis.	COO is the least important product attribute affecting EVAL. When price and quality are comparable, consumers prefer local products.	None given.

Authors	Sample	Methods	Main Findings	Research Suggestions
Festervand and Sokoya 1994	123 Nigerian students and workers.	Means analysis and t-tests.	CET affects ATT, but does not influence PUR.	Use larger sample sizes, test other less developed countries, and improve CET measurements.
Johansson, Ronkainen and Czinkota 1994	43 U.S. farmers.	REG and t-tests.	Country rating, Soviet effect, pro-U.S., pro-Soviet trade, product familiarity, and risk adverse affect EVAL.Pro-Soviet trade and product familiarity affect INT.	None given.
Lim, Darley and Summers 1994	408 U.S. college students.	MANOVA and ANOVA.	Presentation format moderates the effect of COO image on affect, EVAL, and PUR. The presence of additional product cues reduces COO effects.	Test the effect of COO using real products instead of hypothetical products for evaluation.
Maheswaran 1994	119 U.S. college students.	ANOVA.	The effects of COO image and PAE on EVAL is moderated by consumer expertise and attribute information type. Novices and experts rely more on COO and attribute information, respectively, to determine EVAL.	Test the strength of stereotypes' impact on EVAL. Test COO information's influence on attribute elaboration for novices.
Samiee 1994	None.	Conceptual framework.	Brand familiarity-experience, purchase involvement, CET, PAE, brand image, intermediaries' reputation, labeling requirements, market demand, global markets influence, economic development, and political-social-cultural influences affect COO image. COO image influences PUR.	Test with multiple product cues, actual products or visual stimuli, and valid, reliable scales. Use more representative nonstudent samples and test for instrument equivalence. Evaluate product/brand knowledge of respondents when assessing ATT. Test this conceptual model.
Akaah and Yaprak 1993	70 Ghanaian, 54 Turkish, and 101 U.S. college students.	OLS and conjoint analysis.	The effect of COO image on EVAL is weak when multiple product cues are presented. Nationality and product familiarity do not moderate this effect.	Replicate with other samples and products. Test the moderating effects of respondent nationality and product familiarity on COO image.
Chao and Rajendran 1993	499 U.S. college students.	CA and ANOVA.	The effect of COO image on ATT is moderated by occupation and level of foreign product ownership. COO-brand misclassification is high.	Examine other demographic variables in COO effects, in addition to intrinsic and extrinsic cues that affect EVAL.

Authors	Sample	Methods	Main Findings	Research Suggestions
Cordell 1993	205 U.S. college students.	ANOVA.	Consumers prefer products from ICs than LDCs. COO image interacts with brand image and financial product risk in affecting EVAL.	Conduct longitudinal studies and evaluate differences in COO image among market segments. Test for other product cues interactions.
Olsen, Granzin and Biswas 1993	243 U.S. urban adults.	SEM.	Model developed to explain how helping behavior effects PUR.	Clarify costs and benefits of helping behavior, equity, ethno-national identity, similarity and responsibility.
Smith 1993	224 college and 122 older U.S. adults.	GLM.	ROO image influences EVAL. Younger consumers had more negative EVAL than older consumers.	None given.
Peris <i>et al.</i> 1993	140 Spanish and 133 British college students.	CFA and cluster analysis.	COO image and product type influence EVAL. Competitiveness, market suitability, personality, and social class are factors of EVAL.	Examine COO effects of offshore production.
Strutton and Pelton 1993	198 S.E. Asian consumers.	MANOVA and DA.	COO image was uniformly high for both Japan and USA; however Japanese imports rated higher in all perceptual dimensions of EVAL.	Examine COO effects of specific product categories and the influence of various communication medias and messages.
Tse and Gorn 1993	153 U.S. college students.	CFA, MANOVA, ANOVA and t-tests.	COO image is equally salient and more enduring than brand name in affecting EVAL. Main effects and interaction of brand and COO image affect EVAL.	Test with other product categories and countries. Test with a brand that does not have a strong national identity.
Cordell 1992	199 U.S. urban adult consumers.	MANOVA and logit analysis.	Consumers prefer products from industrialized countries than from less industrialized countries. COO effect is stronger for unfamiliar brands.	Conduct study as a real purchase experience with actual products and acquire voluntary non-cued search information from sample.
Lawrence, Marr and Prendergast 1992	150 New Zealand consumers.	T-tests.	COO image, product familiarity, age, income, occupation, and gender influence EVAL.	None given.

Authors	Sample	Methods	Main Findings	Research Suggestions
Lee, Kim and Miller 1992	106 U.S. citizens.	Conjoint analysis and REG.	Price and warranty are more significant than COO towards EVAL and COO's effect is moderated by CET.	Test buyer sensitivity towards COO and find underlying attitudes influencing this sensitivity.
Roth and Romeo 1992	139 U.S., 130 Mexican, and 99 Irish graduate students.	CFA, COR and ANOVA.	COO image and PAE's effects on willingness to buy is mediated by product-country match. COO image seems unidimensional due to similar ratings across its dimensions.	Test variances in product and country familiarities on product-country match and willingness to buy. Also test product usage and country experience.
Hastak and Hong 1991	46 U.S. college students.	MANOVA.	Price and COM image tend to have separate equal influence on EVAL. When presented together, COO influences price.	Use nonstudent sampling and real products presentation to create more realistic settings.
Han 1990	116 U.S. urban consumers.	SEM, CFA and t-tests.	The effect of COO image on ATT is stronger for familiar countries. The effect of COO image on INT is stronger for unfamiliar countries.	Test more countries. Determine factors that form a COO image.
Hong and Wyer 1990	256 U.S. college students.	F-tests.	Both COO image and PAE have greater influence on EVAL when COO information is conveyed 24 hours before attribute information.	Examine other types of product information that may activate a general product evaluation.
Khachaturian and Morganosky 1990	153 U.S. adult consumers.	Paired t-tests.	National industrial development influences COO image. COO image, store type and brand type affect EVAL.	None given.
Papadopoulos, Heslop and Bamossy 1990	299 Canadian, 265 U.S., 243 British, 287 French, 308 W. German, 245 Dutch, 300 Greek, and 300 Hungarian consumers.	CFA and paired t-tests.	EVAL consists of four dimensions: product integrity, price-value, market presence, and market response. ATT is influenced by industrial development, market development, national pride, and perceived economic strength.	Evaluate product-specific attitudes of consumers. Test the longitudinal stability of country images. Investigate the effects of current events on consumer evaluations. Examine the influences of cognitive and affective factors of EVAL and INT in combination with other exogenous variables.

Authors	Sample	Methods	Main Findings	Research Suggestions
Han 1989	116 U.S. urban consumers.	SEM.	COO image directly affects ATT during high familiarity, but is mediated by EVAL during low familiarity.	Test with more countries with varying country-product familiarity. Test factors of country image.
Hong and Wyer 1989	128 U.S. college students.	F-tests.	Effect of COO image is stronger than PAE on EVAL. COO also affects PAE.	Examine other cognitive processing theories. Test information delay effects.
Papadopoulos, Heslop and Beracs 1989	300 Hungarian urban consumers.	CFA and paired t-tests.	COO image, product/market integrity, experience, and status/value affects EVAL. COO affect and national industrial development influence COO image.	Examine effect of COO image on PUR and potential use in market segmentation decisions. Segregate COO and product image factors.
Han 1988	212 U.S. suburban consumers.	SEM and REG.	Patriotism directly affects INT, but does not affect serviceability and country image.	Examine affective factors of INT.
Han and Terpstra 1988	150 U.S. urban consumers.	MANOVA, ANOVA and multivariate F-tests.	COO image has a stronger effect than brand name on bi-national EVAL. COO image and brand name effects vary across dimensions of PAE.	Test other product types, more representative samples, and a between-subject design to reduce subject artifact.
Hooley, Shipley and Krieger 1988	37 U.S. college students.	MDPREF.	The effect of COO image on ATT is moderated by product category.	Evaluate COO effects for specific product groups using image mapping.
Brown, Light and Gazda 1987	249 U.S. college students.	ANOVA, normal z tests and $\chi^2$ tests.	COO image influences ATT. U.S. domestic ATT ranked midrange. Age and gender effects were insignificant.	Examine the strength of and basis for COO biases among consumers.
Shimp and Sharma 1987	4097 U.S. consumers.	CFA and ANOVA.	Patriotism, perceived foreign threat, politico-economic conservatism, and dogmatism influence CET. CET affects ATT, INT, and also PUR to a lesser extent.	Test CETSCALE within other cultures and with other demographic and socioeconomic groups.
Wall and Heslop 1986	635 Canadian consumers.	Means analysis.	The effect of COO image on EVAL is moderated by gender, age, education, income, and occupational status.	None given.



Authors	Sample	Methods	Main Findings	Research Suggestions
Johansson, Douglas and Nonaka 1985	70 U.S. and 82 Japanese graduate students.	CFA and three-stage LSA.	Product usage moderates the effect of COO image on PAE. Product familiarity, product usage, and demographics moderate the effect of PAE on EVAL.	Evaluate more representative samples and other product types. Test with products whose subjective rather than objective characteristics are important to consumers.
Lumpkin, Crawford and Kim 1985	1462 U.S. consumers.	MDA and t-tests.	Perceived risk affects EVAL, but is also mediated by COO image. PAE also affects EVAL, which in turn affects INT.	Test with a larger variety of political, geographical, and economic-based countries.
Erickson, Johansson and Chao 1984	96 U.S. college students.	SEM.	COO and PAE affect EVAL. Brand familiarity and EVAL affect ATT, which in turn affects EVAL as a halo effect.	None given.
Wang and Lamb 1980	273 U.S. consumers.	ANOVA.	COO, national economic development, and national political environment influence U.S. consumers' willingness to buy European products.	Further measurement refinement is needed for these variables. Examine other foreign environmental factors (e.g. culture).
Nagashima 1977	100 Japanese urban workers.	Means analysis.	PAE affect COO image, which in turn affects ATT. From 1967 to 1975, the U.S.'s COO effect has declined while Germany's and Japan's COO effect rose among Japanese businessmen.	None given.
Schooler 1971	866 U.S. households.	ANOVA.	Consumer bias, age, gender, and education affect COO image, which affects EVAL. Race and occupation moderate consumer bias on COO image.	Use caution when comparing studies with different stimuli. Continue investigating extant biases.
Reiersen 1967	242 U.S. college students.	Means analysis.	Consumer exposure to communication and promotion media produced more favorable ATT for Italian products, but not for Japanese.	None given.

## Appendix B

### List of Abbreviations for Article Summaries Table

#### Methods of analysis:

ANOVA: analysis of variance  
ANCOVA: analysis of covariance  
CA: correspondence analysis  
CFA: confirmatory factor analysis  
COR: correlation analysis  
DA: discriminant analysis  
EFA: exploratory factor analysis  
GLM: general linear modeling  
GPA: generalized procrustean analysis  
LSA: least squares analysis  
MANOVA: multivariate analysis of variance  
MDA: multiple discriminant analysis  
MDPREF: multidimensional preference analysis  
MDU: multidimensional unfolding  
REG: regression analysis  
SEM: structural equation modeling  
SNK: Student-Newman-Keuls procedure  
SSA: smallest space analysis

#### Miscellaneous:

IC: industrialized country  
LDC: less developed country  
NIC: newly industrialized country  
JV: joint venture

#### Variables:

ATT: attitude towards the product  
CET: consumer ethnocentrism  
COA: country of assembly  
COD: country of design  
COO: country of origin  
COM: country of manufacture  
COP: country of parts  
DET: domestic economic threat  
EVAL: product evaluation  
INT: purchase intention  
NFC: need for cognition  
PAE: product attributes evaluation  
PAJ: perceived ability to judge product  
PET: personal economic threat  
PUR: product purchase  
ROO: region of origin

## Appendix C

### Foreign Products Survey

#### Instructions:

*You are involved in a study in which you will be asked to consider information about products being offered from other countries to consumers. Be assured that all of your responses will be confidential and anonymous. Also, all of the questions concern your own personal thoughts and opinions, so there are no wrong answers. We are only interested in your opinions.*

*Please complete the survey to the best of your abilities. Do not skip questions, but answer every question in the survey in the order that they are presented. Your attitudes and opinions are greatly appreciated and will have a substantial impact upon this study.*

*Thank you for your participation!*

#### Survey:

---

*First, we would like you to answer some general questions about products from three countries. Please complete the statement with each of the three countries provided and choose the number in the scale that best reflects your opinion about that country.*

---

Whenever available, I would prefer to buy products made in \_\_\_\_\_.

<b>Japan</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
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<b>South Korea</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
--------------------	-------------------	---	---	---	---	---	---	---	----------------

<b>China</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
--------------	-------------------	---	---	---	---	---	---	---	----------------

I would feel guilty if I bought a \_\_\_\_\_ product.

<b>Japanese</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
-----------------	-------------------	---	---	---	---	---	---	---	----------------

<b>South Korean</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
---------------------	-------------------	---	---	---	---	---	---	---	----------------

<b>Chinese</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
----------------	-------------------	---	---	---	---	---	---	---	----------------

I would never buy \_\_\_\_\_ products.

<b>Japanese</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>South Korean</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>Chinese</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

Whenever possible, I avoid buying \_\_\_\_\_ products.

<b>Japanese</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>South Korean</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>Chinese</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

I do not like the idea of owning \_\_\_\_\_ products.

<b>Japanese</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>South Korean</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>Chinese</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

If two products were equal in quality, but one was from \_\_\_\_\_ and one was from the USA, I would pay 10% more for the product from the USA.

<b>Japan</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>South Korea</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>China</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

---

*Next, we want you to consider your attitude toward products from each of these countries. Please answer each of the next set of questions by choosing the number that best reflects your opinion.*

---

My overall attitude towards products made in **South Korea** is:

Negative	1	2	3	4	5	6	7	Positive
Unfavorable	1	2	3	4	5	6	7	Favorable
Bad	1	2	3	4	5	6	7	Good

My overall attitude towards products made in **Japan** is:

Negative	1	2	3	4	5	6	7	Positive
Unfavorable	1	2	3	4	5	6	7	Favorable
Bad	1	2	3	4	5	6	7	Good

My overall attitude towards products made in **China** is:

Negative	1	2	3	4	5	6	7	Positive
Unfavorable	1	2	3	4	5	6	7	Favorable
Bad	1	2	3	4	5	6	7	Good

---

*Now consider the products that typically come from these countries. Please complete the statement with each of the three countries provided and choose the number in the scale that best reflects your opinion about that country.*

---

Products made in \_\_\_\_\_ are carefully produced and have fine workmanship.

<b>South Korea</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>Japan</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>China</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

Products made in \_\_\_\_\_ are generally of a lower quality than similar products available from other countries.

<b>South Korea</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>Japan</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>China</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

Products made in \_\_\_\_\_ usually show a very clever use of color and design.

<b>South Korea</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>Japan</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>China</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

Products made in \_\_\_\_\_ show a very high degree of technological advancement.

<b>South Korea</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>Japan</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>China</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

Products made in \_\_\_\_\_ are usually quite reliable and seem to last the desired length of time.

<b>South Korea</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>Japan</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>China</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

Products made in \_\_\_\_\_ are usually a good value for the money.

<b>South Korea</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>Japan</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>China</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

---

*Please indicate how appropriate each of these descriptions is to you about each country listed below:*

---

**China**

Rich	1	2	3	4	5	6	7	Poor
High level of education	1	2	3	4	5	6	7	Low level of education
Technologically advanced	1	2	3	4	5	6	7	Not technologically advanced

**South Korea**

Rich	1	2	3	4	5	6	7	Poor
High level of education	1	2	3	4	5	6	7	Low level of education
Technologically advanced	1	2	3	4	5	6	7	Not technologically advanced

**Japan**

Rich	1	2	3	4	5	6	7	Poor
High level of education	1	2	3	4	5	6	7	Low level of education
Technologically advanced	1	2	3	4	5	6	7	Not technologically advanced

---

*Now indicate how appropriate each of these descriptions is to you about the people of each country listed below:*

---

**People from South Korea**

Trustworthy	1	2	3	4	5	6	7	Not trustworthy
Hard working	1	2	3	4	5	6	7	Not hard working
Likeable	1	2	3	4	5	6	7	Not likeable

**People from China**

Trustworthy	1	2	3	4	5	6	7	Not trustworthy
Hard working	1	2	3	4	5	6	7	Not hard working
Likeable	1	2	3	4	5	6	7	Not likeable

**People from Japan**

Trustworthy	1	2	3	4	5	6	7	Not trustworthy
Hard working	1	2	3	4	5	6	7	Not hard working
Likeable	1	2	3	4	5	6	7	Not likeable



---

*Next, indicate how appropriate each of these descriptions is to you about your desire to interact with each country listed below:*

---

### **Desired Interaction with Japan**

We should have closer ties with Japan.	1	2	3	4	5	6	7	We should not have closer ties with Japan.
Ideal country	1	2	3	4	5	6	7	Not ideal country
Would welcome more investment from Japan.	1	2	3	4	5	6	7	Would not welcome more investment from Japan.

### **Desired Interaction with South Korea**

We should have closer ties with S. Korea.	1	2	3	4	5	6	7	We should not have closer ties with S. Korea.
Ideal country	1	2	3	4	5	6	7	Not ideal country
Would welcome more investment from S. Korea.	1	2	3	4	5	6	7	Would not welcome more investment from S. Korea.

### **Desired Interaction with China**

We should have closer ties with China.	1	2	3	4	5	6	7	We should not have closer ties with China.
Ideal country	1	2	3	4	5	6	7	Not ideal country
Would welcome more investment from China.	1	2	3	4	5	6	7	Would not welcome more investment from China.

---

*Please indicate how appropriate each of these descriptions is to you about products in general from each country listed below:*

---

**South Korean products**

Not at all familiar	1	2	3	4	5	6	7	Highly familiar
Don't know them well at all	1	2	3	4	5	6	7	Know them very well
Don't recognize them right away	1	2	3	4	5	6	7	Recognize them right away

**Japanese products**

Not at all familiar	1	2	3	4	5	6	7	Highly familiar
Don't know them well at all	1	2	3	4	5	6	7	Know them very well
Don't recognize them right away	1	2	3	4	5	6	7	Recognize them right away

**Chinese products**

Not at all familiar	1	2	3	4	5	6	7	Highly familiar
Don't know them well at all	1	2	3	4	5	6	7	Know them very well
Don't recognize them right away	1	2	3	4	5	6	7	Recognize them right away

---

*Now consider how you feel about these three countries. Please complete the statement with each of the three countries provided and choose the number in the scale that best reflects your opinion about that country.*

---

I dislike the \_\_\_\_\_.

<b>Chinese</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>South Koreans</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>Japanese</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

\_\_\_\_\_ is not a reliable trading partner.

<b>China</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>South Korea</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>Japan</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

\_\_\_\_\_ wants to gain economic power over the United States.

<b>China</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>South Korea</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>Japan</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

\_\_\_\_\_ is taking advantage of the United States.

<b>China</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>South Korea</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>Japan</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

\_\_\_\_\_ has too much economic influence in the United States.

<b>China</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>South Korea</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>Japan</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

The \_\_\_\_\_ are doing business unfairly with the United States.

<b>Chinese</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>South Koreans</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>Japanese</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

I feel angry towards \_\_\_\_\_.

<b>China</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>South Korea</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>Japan</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

I like the \_\_\_\_\_.

<b>Chinese</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>South Koreans</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
<b>Japanese</b>	Strongly disagree	1	2	3	4	5	6	7	Strongly agree

---

*Next, consider how you feel about purchasing foreign and domestic products. Please answer the following questions by choosing the number that best reflects your opinion.*

---

Only those products that are unavailable in the U.S. should be imported.

Strongly disagree   1   2   3   4   5   6   7   Strongly agree

American products, first, last, and foremost.

Strongly disagree   1   2   3   4   5   6   7   Strongly agree

Purchasing foreign-made products is un-American.

Strongly disagree   1   2   3   4   5   6   7   Strongly agree

It is not right to purchase foreign products, because it puts Americans out of jobs.

Strongly disagree   1   2   3   4   5   6   7   Strongly agree

A real American should always buy American-made products.

Strongly disagree   1   2   3   4   5   6   7   Strongly agree

We should purchase products manufactured in America instead of letting other countries get rich off us.

Strongly disagree   1   2   3   4   5   6   7   Strongly agree

Americans should not buy foreign products, because this hurts American business and causes unemployment.

Strongly disagree   1   2   3   4   5   6   7   Strongly agree

It may cost me in the long-run but I prefer to support American products.

Strongly disagree   1   2   3   4   5   6   7   Strongly agree

We should buy from foreign countries only those products that we cannot obtain within our own country.

Strongly disagree   1   2   3   4   5   6   7   Strongly agree

American consumers who purchase products made in other countries are responsible for putting their fellow Americans out of work.

Strongly disagree   1   2   3   4   5   6   7   Strongly agree

Buy American-made products. Keep America working.

Strongly disagree   1   2   3   4   5   6   7   Strongly agree

It is always best to purchase American products.

Strongly disagree   1   2   3   4   5   6   7   Strongly agree

There should be very little trading or purchasing of goods from other countries unless out of necessity.

Strongly disagree   1   2   3   4   5   6   7   Strongly agree

Curbs should be put on all imports.

Strongly disagree   1   2   3   4   5   6   7   Strongly agree

Foreigners should not be allowed to put their products on our markets.

Strongly disagree   1   2   3   4   5   6   7   Strongly agree

Foreign products should be taxed heavily to reduce their entry into the U.S.

Strongly disagree   1   2   3   4   5   6   7   Strongly agree

American people should always buy American-made products instead of imports.

Strongly disagree   1   2   3   4   5   6   7   Strongly agree

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*In this section, we would like for you to tell us what you think this survey was about.*

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*Finally, please answer these general demographical questions.*

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1. What is your age in years? \_\_\_\_\_
2. Which state do you reside in? \_\_\_\_\_
3. What is your annual income in U.S. dollars? \$\_\_\_\_\_
4. What is your occupation? \_\_\_\_\_
5. What is your country of citizenship? \_\_\_\_\_
6. What is your race or races? \_\_\_\_\_
7. Is English your first language?        \_\_\_\_\_ Yes        \_\_\_\_\_ No
8. What is your gender?        \_\_\_\_\_ Male        \_\_\_\_\_ Female

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*This is the end of the survey. Thank you very much for your help. If you have any further questions about this study, please contact Larry L. Carter at [llcarter@odu.edu](mailto:llcarter@odu.edu) or call (757) 613-7506.*

## Appendix D

### Inter-Item Correlation Matrices

#### Inter-Item Correlation Matrix – Willingness to Buy (Japan)

	wtb1j	wtb2j_rc	wtb3j_rc	wtb4j_rc	wtb5j_rc	wtb6j_rc
wtb1j	1.000					
wtb2j_rc	.365*	1.000				
wtb3j_rc	.400*	.580*	1.000			
wtb4j_rc	.419*	.607*	.691*	1.000		
wtb5j_rc	.431*	.605*	.696*	.774*	1.000	
wtb6j_rc	.223	.329*	.345*	.421*	.428*	1.000

\* Inter-item correlation values > 0.30.

#### Inter-Item Correlation Matrix – Willingness to Buy (South Korea)

	wtb1s	wtb2s_rc	wtb3s_rc	wtb4s_rc	wtb5s_rc	wtb6s_rc
wtb1s	1.000					
wtb2s_rc	.270	1.000				
wtb3s_rc	.314*	.629*	1.000			
wtb4s_rc	.387*	.663*	.762*	1.000		
wtb5s_rc	.370*	.660*	.754*	.821*	1.000	
wtb6s_rc	.214	.358*	.379*	.479*	.474*	1.000

\* Inter-item correlation values > 0.30.

#### Inter-Item Correlation Matrix – Willingness to Buy (China)

	wtb1c	wtb2c_rc	wtb3c_rc	wtb4c_rc	wtb5c_rc	wtb6c_rc
wtb1c	1.000					
wtb2c_rc	.392*	1.000				
wtb3c_rc	.335*	.602*	1.000			
wtb4c_rc	.467*	.614*	.705*	1.000		
wtb5c_rc	.466*	.651*	.704*	.793*	1.000	
wtb6c_rc	.319*	.378*	.401*	.482*	.491*	1.000

\* Inter-item correlation values > 0.30.



### Inter-Item Correlation Matrix – Evaluation (Japan)

	evalj	eva2j_rc	eva3j	eva4j	eva5j	eva6j
evalj	1.000					
eva2j_rc	.554*	1.000				
eva3j	.474*	.289	1.000			
eva4j	.565*	.387*	.533*	1.000		
eva5j	.661*	.484*	.426*	.691*	1.000	
eva6j	.522*	.359*	.467*	.579*	.696*	1.000

\* Inter-item correlation values > 0.30.

### Inter-Item Correlation Matrix – Evaluation (South Korea)

	evals	eva2s_rc	eva3s	eva4s	eva5s	eva6s
evals	1.000					
eva2s_rc	.511*	1.000				
eva3s	.487*	.303*	1.000			
eva4s	.579*	.448*	.574*	1.000		
eva5s	.650*	.484*	.542*	.699*	1.000	
eva6s	.523*	.373*	.473*	.593*	.679*	1.000

\* Inter-item correlation values > 0.30.

### Inter-Item Correlation Matrix – Evaluation (China)

	evalc	eva2c_rc	eva3c	eva4c	eva5c	eva6c
evalc	1.000					
eva2c_rc	.531*	1.000				
eva3c	.418*	.259	1.000			
eva4c	.498*	.414*	.514*	1.000		
eva5c	.656*	.517*	.447*	.646*	1.000	
eva6c	.508*	.394*	.421*	.474*	.606*	1.000

\* Inter-item correlation values > 0.30.

### Inter-Item Correlation Matrix – COO (Japan)

	coo1j_rc	coo2j_rc	coo3j_rc	coo4j_rc	coo5j_rc	coo6j_rc	coo7j_rc	coo8j_rc	coo9j_rc
coo1j_rc	1.000								
coo2j_rc	.707*	1.000							
coo3j_rc	.676*	.866*	1.000						
coo4j_rc	.298	.350*	.376*	1.000					
coo5j_rc	.320*	.433*	.437*	.654*	1.000				
coo6j_rc	.288	.392*	.386*	.762*	.689*	1.000			
coo7j_rc	.298	.323*	.329*	.374*	.332*	.365*	1.000		
coo8j_rc	.269	.261	.252	.391*	.244	.364*	.700*	1.000	
coo9j_rc	.226	.237	.246	.284	.186	.268	.697*	.646*	1.000

\* Inter-item correlation values > 0.30.

### Inter-Item Correlation Matrix – COO (South Korea)

	coo1s_rc	coo2s_rc	coo3s_rc	coo4s_rc	coo5s_rc	coo6s_rc	coo7s_rc	coo8s_rc	coo9s_rc
coo1s_rc	1.000								
coo2s_rc	.604*	1.000							
coo3s_rc	.621*	.781*	1.000						
coo4s_rc	.289	.294	.314*	1.000					
coo5s_rc	.097	.267	.229	.541*	1.000				
coo6s_rc	.195	.310*	.306*	.703*	.658*	1.000			
coo7s_rc	.341*	.340*	.359*	.464*	.336*	.453*	1.000		
coo8s_rc	.418*	.373*	.358*	.366*	.197	.336*	.672*	1.000	
coo9s_rc	.376*	.340*	.361*	.409*	.253	.374*	.785*	.735*	1.000

\* Inter-item correlation values > 0.30.

### Inter-Item Correlation Matrix – COO (China)

	coo1c_rc	coo2c_rc	coo3c_rc	coo4c_rc	coo5c_rc	coo6c_rc	coo7c_rc	coo8c_rc	coo9c_rc
coo1c_rc	1.000								
coo2c_rc	.551*	1.000							
coo3c_rc	.499*	.717*	1.000						
coo4c_rc	.173	.222	.221	1.000					
coo5c_rc	.081	.193	.208	.457*	1.000				
coo6c_rc	.147	.231	.213	.737*	.578*	1.000			
coo7c_rc	.218	.173	.203	.377*	.232	.310*	1.000		
coo8c_rc	.314*	.249	.264	.324*	.063	.253	.569*	1.000	
coo9c_rc	.247	.179	.231	.315*	.136	.245	.704*	.674*	1.000

\* Inter-item correlation values > 0.30.

### Inter-Item Correlation Matrix – Attitude (Japan)

	att1j	att2j	att3j
att1j	1.000		
att2j	.927*	1.000	
att3j	.921*	.907*	1.000

\* Inter-item correlation values > 0.30.

### Inter-Item Correlation Matrix – Attitude (South Korea)

	att1s	att2s	att3s
att1s	1.000		
att2s	.897*	1.000	
att3s	.894*	.885*	1.000

\* Inter-item correlation values > 0.30.

### Inter-Item Correlation Matrix – Attitude (China)

	att1c	att2c	att3c
att1c	1.000		
att2c	.933*	1.000	
att3c	.924*	.921*	1.000

\* Inter-item correlation values > 0.30.

### Inter-Item Correlation Matrix – Animosity (Japan)

	ani1j	ani2j	ani3j	ani4j	ani5j	ani6j	ani7j	ani8j_rc
ani1j	1.000							
ani2j	.475*	1.000						
ani3j	.279	.275	1.000					
ani4j	.401*	.402*	.570*	1.000				
ani5j	.275	.251	.424*	.552*	1.000			
ani6j	.415*	.392*	.395*	.598*	.467*	1.000		
ani7j	.568*	.377*	.260	.445*	.257	.515*	1.000	
ani8j_rc	.463*	.331*	.196	.298	.149	.309*	.437*	1.000

\* Inter-item correlation values > 0.30.

### Inter-Item Correlation Matrix – Animosity (South Korea)

	ani1s	ani2s	ani3s	ani4s	ani5s	ani6s	ani7s	ani8s_rc
ani1s	1.000							
ani2s	.567*	1.000						
ani3s	.252	.357*	1.000					
ani4s	.438*	.469*	.551*	1.000				
ani5s	.240	.292	.403*	.510*	1.000			
ani6s	.425*	.457*	.450*	.646*	.538*	1.000		
ani7s	.619*	.490*	.308*	.498*	.333*	.573*	1.000	
ani8s_rc	.527*	.417*	.171	.357*	.124	.338*	.495*	1.000

\* Inter-item correlation values > 0.30.

### Inter-Item Correlation Matrix – Animosity (China)

	ani1c	ani2c	ani3c	ani4c	ani5c	ani6c	ani7c	ani8c_rc
ani1c	1.000							
ani2c	.497*	1.000						
ani3c	.291	.325*	1.000					
ani4c	.427*	.452*	.627*	1.000				
ani5c	.281	.320*	.480*	.607*	1.000			
ani6c	.488*	.535*	.465*	.653*	.526*	1.000		
ani7c	.593*	.478*	.321*	.499*	.341*	.579*	1.000	
ani8c_rc	.563*	.390*	.301*	.370*	.243	.414*	.552*	1.000

\* Inter-item correlation values > 0.30.

**Inter-Item Correlation Matrix – CET (United States)**

	cet01	cet02	cet03	cet04	cet05	cet06	cet07	cet08	cet09	cet10	cet11	cet12	cet13	cet14	cet15	cet16	cet17
cet01	1.000																
cet02	.651*	1.000															
cet03	.515*	.586*	1.000														
cet04	.583*	.663*	.712*	1.000													
cet05	.568*	.674*	.755*	.740*	1.000												
cet06	.600*	.672*	.607*	.747*	.690*	1.000											
cet07	.572*	.655*	.655*	.798*	.721*	.798*	1.000										
cet08	.533*	.699*	.530*	.654*	.630*	.733*	.705*	1.000									
cet09	.735*	.623*	.519*	.622*	.574*	.654*	.640*	.608*	1.000								
cet10	.522*	.598*	.653*	.685*	.669*	.635*	.715*	.559*	.595*	1.000							
cet11	.540*	.668*	.517*	.657*	.602*	.708*	.699*	.731*	.655*	.594*	1.000						
cet12	.537*	.662*	.561*	.666*	.637*	.680*	.690*	.703*	.637*	.606*	.757*	1.000					
cet13	.627*	.626*	.610*	.681*	.629*	.674*	.713*	.616*	.689*	.670*	.652*	.669*	1.000				
cet14	.481*	.537*	.508*	.583*	.528*	.620*	.602*	.594*	.574*	.559*	.591*	.586*	.649*	1.000			
cet15	.491*	.505*	.628*	.613*	.612*	.549*	.639*	.483*	.506*	.644*	.499*	.572*	.665*	.580*	1.000		
cet16	.487*	.500*	.564*	.635*	.555*	.628*	.659*	.542*	.533*	.613*	.571*	.596*	.666*	.670*	.690*	1.000	
cet17	.582*	.662*	.664*	.736*	.726*	.706*	.753*	.674*	.654*	.715*	.670*	.722*	.714*	.639*	.677*	.684*	1.000

\* Inter-item correlation values > 0.30.

## **VITA**

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### **Educational Background**

- Ph.D. Business Administration – Marketing: Old Dominion University, 2009.
- M.S. Business Administration – Marketing: Virginia Tech, 2002.
- B.S. Marketing Management: Virginia Tech, 1997.

### **Publications**

- Singhapakdi, Anusorn, Mahesh Gopinath, Janet K.M. Marta and Larry L. Carter (2008), “Antecedents and Consequences of Perceived Importance of Ethics: A Study of Thai Businesspeople.” *Journal of Business Ethics* 81 (4): 887-904.
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- Carter, Larry L. (2005), “Consumer Attitude towards Cross-Border Brand Alliances: The Roles of Brand Fit, Country of Origin Fit and Brand Familiarity.” *2005 Academy of Marketing Science Annual Conference Proceedings*. Tampa, FL (abstract published).
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### **Teaching Background**

- Adjunct Instructor of Marketing: Old Dominion University, 2004 – 2009.
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- Adjunct Instructor of Marketing: Virginia Tech, 2001.
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- Golden Key International Honour Society member since 2007.
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- 2004 recipient of the Theodore F. and Constance C. Constant Fellowship.
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